1952

VICTORIA

DEPARTMENT OF HEALTH

THIRTIETH REPORT

OF THE

COMMISSION OF PUBLIC HEALTH

AND

DIVISIONAL REPORTS

TO THE

MINISTER OF HEALTH.

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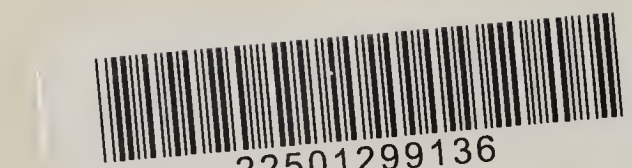

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Walter Ernest Summons, O.B.E., M.D., D.P.H.

Frank Victor Gordon Scholes, C.M.G., M.D., F.R.A.C.P., D.P.H.

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W. B. Monteath, Esquire — Representing Cities, Towns and Boroughs other than Metropolitan Municipalities.

THIRTIETH REPORT OF THE COMMISSION OF PUBLIC HEALTH, 1951-52

To the Honorable W. O. Fulton, M.L.A., Minister of Health.

Sir,

We have the honour to submit, in accordance with the provisions of Section 13 (3) of the *Health Act* 1928, our Report for the year ending 30th June, 1952.

The Divisional Reports of various Branches and Divisions under the control of the Chief Health Officer are appended to this Report. Such a composite publication refers to two different periods of time. The Commission of Public Health has to measure all administrative affairs and progress by the financial year whilst the reports of medical officers are based on vital health statistics, and these are prepared for the calendar year. Any apparent discrepancies in figures which may appear in this publication are due to this cause.

Sanitary circumstances in some parts of the State continue to be a matter of concern to the Commission. The rapid expansion of building in unsewered areas combined with unmade roads which become impassable in winter, greatly hindered the operation of some sanitary services.

The Commission is pleased to report that the proportion of pasteurized milk in the State is increasing.

It is the Commission's opinion that the general adoption of pasteurization will contribute to the limitation of milk-borne diseases such as diphtheria, scarlet fever, and typhoid fever. From each of these diseases epidemics have occurred here in recent years. Improved transport facilities will enable residents in scattered rural districts to obtain bottled pasteurized milk from larger centres. Bottled pasteurized milk from Ballarat is available as far north as Donald.

The infant mortality rate (deaths of infants under one year per 1,000 live births) was 22·6. This represents an increase from last year's record low of 20·09. Despite this increase the rate is still among the lowest in the world. In England and Wales the figure for 1950 was 30·0; in New Zealand for 1951, 22·8 (lower figures have been recorded), whilst the latest figure available for Sweden (provisional 1950) is 20·5.

There was again a relatively high poliomyelitis incidence. The incidence was highest during the month of August and amongst the 0–10 age group.

Murray Valley encephalitis did not occur this year, but might do so when conditions are favourable.

Arrangements were made with the Director of the School of Public Health and Tropical Medicine, Sydney, to provide a course of instruction on mosquito control for a limited number of departmental and municipal health inspectors. As a result of this course trained personnel were available to deal with the control of mosquitoes in those places where encephalitis might arise. The course was approved by the Minister of Health, and a special grant of £2,000 was given on his recommendation.

RETIREMENT OF Dr. COLE.

Dr. G. E. Cole, after 30 years of distinguished public health service to the community, retired on the 9th February, 1952. Since 1949, Dr. Cole had been Chairman of the Commission of Public Health. He had been closely connected with the improved medical and dental services in schools, with the inauguration of smallpox vaccination for children under seven years of age and with the commencement of the Emergency Housekeeper Service. His experience and advice were most valuable to the Commission of Public Health. The Commission wishes to record its appreciation of the immense help so generously and graciously given, not only to the Commission, but to all who sought guidance and advice from Dr. Cole.

RESEARCH AWARD.

Dr. B. P. McCloskey, Medical Supervisor, Poliomyelitis, was awarded the triennial B.M.A. prize for original work in medicine and the allied sciences. The award is open to all members throughout Australia, Mandated Territories, and New Zealand. Dr. McCloskey received the award for his work on the relation of prophylactic inoculations to the onset of poliomyelitis. The citation for the award states that the work was original and an important contribution from an individual, unaided.

POSITION OF SECRETARY.

The Commission learned with regret in January last that prolonged ill health had rendered necessary the retirement of Mr. J. Whitlock from the Public Service. Mr. Whitlock had held the office of Secretary of the Commission for twelve years. The Commission recorded its deep appreciation of the service given by Mr. Whitlock and the hope that his release from duty would bring about a speedy improvement in his health.

During the period of nearly two years from the onset of Mr. Whitlock's illness until the appointment of Mr. Stafford, the duties of Secretary were performed by Mr. A. Burke. The Commission wishes to place on record its appreciation of the work which Mr. Burke carried out so efficiently in the period during which he acted as Secretary.

INFECTIOUS DISEASES.

Tuberculosis.

In Victoria, in 1951, there were 406 deaths from all varieties of tuberculosis, a death rate of 18 per 100,000.

Death rates from Victoria and some other countries for 1948 were as follows :—

Victoria	31 per 100,000
England	51 per 100,000
Sweden	42 per 100,000
U.S.A.	30 per 100,000
Denmark	25 per 100,000
The province of Ontario	19 per 100,000

Deaths from *Pulmonary Tuberculosis* in Victoria last year numbered 358, a rate of 16 per 100,000.

The following figures show that the death rate in Victoria is falling continuously :—

In 1890 the death rate per 100,000 was	185
In 1910 the death rate per 100,000 was	101
In 1930 the death rate per 100,000 was	60
In 1950 the death rate per 100,000 was	20
In 1951 the death rate per 100,000 was	18

Beds for Tuberculosis.

The bed position continued to improve in 1951, although 79 beds were lost by the closure of Mint-place Annexe, which was required by the Cancer Institute. However, improvement in the availability of staff enabled the opening of an additional 70 female beds at Greenvale Sanatorium. With the valued co-operation of the Board of Management, a Unit of 50 beds was provided at Fairfield Hospital. The opening of the Chalet at Geelong Hospital (30 beds) was an additional help. There were 880 beds available at 31st December, 1951. The waiting list for beds was further reduced.

Mass X-ray Surveys.

The work of this Division was maintained at a high level, 137 individual surveys being conducted in metropolitan and country areas. Some 280,000 miniature films, and 25,000 large films were taken, resulting in the detection of 767 persons with radiological evidence of active pulmonary infection.

B.C.G. Immunization.

The campaign for immunization of children of school-leaving age with B.C.G. vaccine was further developed. The response of parents was gratifying, approximately 90 per cent. of those approached accepting the Departmental offer. There were 27,743 children of all ages Mantoux-tested and 9,614, the negative reactors, given B.C.G. vaccine. A programme of visits to all secondary schools was planned and started by which all children 13–17 years of age will be offered immunization within two years.

Commonwealth Assistance.

The financial help made available by the financial arrangement between this State and the Commonwealth continued to assist the development of the Tuberculosis Service. Under the arrangement £249,493 was made available in 1951 for capital works and £546,504 for maintenance. Financial allowances were paid to 2,039 single and married sufferers involving Commonwealth expenditure of £472,704.

Diphtheria.

An outbreak of diphtheria in the metropolitan area caused five deaths, and at least four of these patients had not been inoculated, whilst the history of the fifth case threw considerable doubt as to when inoculation had been carried out. It is interesting to note that although 141 cases occurred, the only cases which died had not been inoculated and in one of these, if the child had been inoculated in infancy, it had not received a boosting dose at commencement of school life as is recommended by the Department of Health.

Sufficient immunizing material was issued through the Department of Health to fully protect 51,600 children. Of this number 32,270 were protected following on the publicity afforded the metropolitan outbreak.

In 1951, the incidence of diphtheria was 8·37 per 100,000 of population. This is the lowest figure ever recorded in Victoria.

Scarlet Fever.

The incidence of scarlet fever was 41·29 per 100,000 of population.

Early in 1952, there was an outbreak of scarlet fever in Traralgon. Following a few cases in February, the peak of the outbreak was reached in March and April. During five months 60 cases were notified. The majority of cases occurred amongst school children, the spread being apparently by direct contact.

Throat swabs were taken of 210 school children, of whom 16 per cent. were carriers of B haemolytic streptococci, Group A. The positive swabs were typed at the Epidemiological Unit at Fairfield Hospital. The results showed that the prevalent strain was Type 14 which has been the common type found in the metropolitan area. Associated with the outbreak of scarlet fever were four cases of acute nephritis and one of chorea. Not one of these had the rash of scarlet fever although there was a history of sore throat in each case.

Acute Nephritis.

During last winter there was a marked increase in the number of cases of acute nephritis in certain areas of the State.

The Fairfield Epidemiological Unit, with the assistance of officers of the Department swabbed the throats of several hundred school children in certain areas where nephritis was occurring.

A high streptococcal (Group A) infection rate was found among school children where the incidence of acute nephritis was high ; up to 33 per cent. of school children in some areas had positive swabs. After the outbreaks of nephritis had subsided, as many as possible of the original children were re-swabbed and a marked fall in the streptococcal infection rate was found.

Although scarlet fever and streptococcal throat infections have been moderately prevalent this winter, there does not appear to be any noticeable increase in nephritis.

Murray Valley Encephalitis.

There were no cases of Murray Valley encephalitis (M.V.E.) during the summer of 1951–52, in contrast to the previous summer when about 40 cases occurred, of which sixteen were fatal.

A research unit, under the direction of the Walter and Eliza Hall Institute, with headquarters at Merbein, carried out extensive field investigations during last summer. Dr. William Reeves, Associate Professor of Epidemiology, University of California, U.S.A., spent three months with the research team concentrating mainly on mosquito research.

The full results of these investigations are not yet available. Attempts to isolate the virus from various wild birds, fowls, and mosquitoes are continuing. These have been unsuccessful to date, presumbably due to the absence of the virus from this area during the past summer.

Antibodies, which indicate past infection, have been found in the blood in a large variety of wild birds, fowls, and certain animals such as horses, dogs, foxes, &c., but the roles played in the transmission of the disease by these birds and animals remain unsolved at the moment. Workers at the Walter and Eliza Hall Institute consider that wild birds may well constitute a reservoir of the virus, and that insect vectors, probably mosquitoes, transmit the disease directly to man or indirectly through the medium of some other host.

Leptospirosis.

The occurrence of a case of leptospiral meningitis in a slaughterman prompted the Fairfield Epidemiological Unit, in collaboration with officers of the Department, to extend the investigations into this disease so as to cover the larger metropolitan abattoirs. In the course of a few weeks, two further cases of leptospiral meningitis (L. pomona) occurred among abattoir workers. These cases bring the total number of known clinical cases of leptospirosis to nineteen. There is little doubt, however, that this figure represents only a relatively small percentage of the total cases occurring in Victoria.

A serological survey on abattoir workers was recently carried out in the metropolitan area. Blood specimens totalling 388 were collected from volunteers, of which 39 were found to be positive for leptospiral antibodies.

An analysis of the occupations of the positive reactors shows that persons (particularly slaughtermen) handling pigs have the highest infection rate, followed next by beef and calf handlers. These results are in accordance with the findings obtained in the initial investigation into this disease by the Fairfield Epidemiological Unit (Report of the Commission, 1950).

As a result of these findings a recommendation was made that leptospirosis be declared an occupational hazard under the Workers' Compensation Act.

Poliomyelitis.

The number of cases of poliomyelitis reported in 1951 was 433, an incidence of 19 per 100,000 population. This is the third consecutive year in which there has been a relatively high poliomyelitis incidence. Such a consecutive high incidence is not peculiar to Victoria but is found in other States and overseas. Adequate facilities are available throughout Victoria for the treatment of acute cases.

A panel of diagnostic consultants retained for the diagnosis of poliomyelitis continues to be of valuable service to the general practitioner. This service is available free of charge to any medical practitioner in the State.

Departmental medical officers and orthopaedic consultants conduct after-care clinics in all large centres of population in Victoria. The home treatment service was extended during the year to Gippsland and to North-Eastern Victoria. Education of physically handicapped patients has been facilitated by the appointment of a special officer in the Education Department.

Smallpox.

(*Vaccination.*)

Municipalities have responded more readily to the Department's suggestion to organize campaigns for protecting young children against smallpox. Materials are provided free and all incidental expenses are paid by this Department. The number of municipalities which conducted campaigns in 1951 was 55: this is more than double the number in 1950—the number of children protected, 17,598, was nearly three times the number protected in 1950. Even so, the percentage of unprotected citizens in the community is a matter of concern and vigorous efforts to build up a smallpox resistant population will continue.

Hansen's Disease (Leprosy).

Early in 1951, a patient who had been admitted to a public hospital for treatment of a heart condition was found to have Hansen's disease. The General Health Branch was informed and arrangements were made with the Commonwealth Health Department for the patient to be isolated temporarily at the Quarantine Station, Portsea. Two special nurses were engaged to attend the case.

About eight years earlier a unit for the accommodation of cases of exotic diseases had been erected adjacent to Fairfield Hospital. This unit had not been completed or handed over by the Public Works Department, and it was, therefore, decided to request that Department to undertake such works and installations as would render sufficient of the unit habitable to enable the patient and her attendants to be accommodated. The work was completed and the patient was transferred from Portsea on the 31st of May, 1951.

A further section of the unit was put into commission in October, when a second case of Hansen's disease was admitted from the same public hospital as the first.

A third case was admitted from another public hospital in December.

Chemical Laboratory.

During the year the medico-legal chemists were transferred from the Health Department to the Crown Law Department. These chemists are remaining at the State Laboratories until laboratory accommodation is available at the Morgue.

Industrial Hygiene.

Following the recent appointment of an additional officer to the staff, it will now be possible for this Division to devote more time to the many important problems connected with the occurrence of silicosis and allied diseases in industry.

As the activities of this Division become more widely known to medical people generally, the greater become the demands made upon it to help with the diagnosis and treatment of industrial diseases. On many occasions in the past, this help has been requested by some of the staff of the large public hospitals and has been given despite the fact that this Division has no official status at these hospitals. It is felt that this very important function of the Division would be encouraged if the work were officially recognized.

Help with the diagnosis and treatment of industrial diseases is given free of charge also to any medical practitioner, but there are still many practitioners who are not aware of the activities of this Division. Steps will be taken to publicize the work of this Division amongst all members of the medical profession and encourage them to refer their problems of industrial hygiene to this Division.

The promulgation of the Benzene Regulations in October, 1950, has had the desired effect of discouraging the use of this harmful substance in industry and in consequence the risk of poisoning by this substance has considerably declined.

PATENT MEDICINES ADVISORY COMMITTEE.

During the year 1951–52 the Patent Medicines Advisory Committee continued to function in accordance with the provisions of the *Health* (*Patent Medicines*) *Act* 1942, and 45 meetings were held.

The Committee considered 1,050 applications for registration and, of this number, recommended 700 to the Chief Health Officer for registration in accordance with the provisions of the Act.

COUNTRY SEWERAGE.

Preliminary plans for new sewerage systems were examined, but no construction work was commenced on any new schemes. House connections in Maffra are practically at a standstill. Since the last report only twelve houses have been connected to the sewer, making a total of 164 now connected, which is approximately 15–20 per cent. of the total.

The treatment works at Moe are under construction. Work is being carried out on a day-labour basis and is progressing slowly. At the same time, contracts are in progress for the construction of an outfall sewer from the S.E.C. Settlement at Newborough, and for the main Moe township outfall sewer. About 700 Newborough homes will be connected when the treatment works commence operations which is expected to be within the next eighteen months.

Quarterly inspections of sewage treatment works were practically abandoned owing to staff illness and resignations. However, each plant was visited once during the year. It is hoped that the quarterly inspections will be resumed in the near future.

HUMANE KILLING OF ANIMALS.

In furtherance of its policy of promoting humane methods of slaughter at abattoirs, the Commission on 6th May, 1952, resolved that the Meat Supervision Regulations be amended to prohibit the use of the hammer in slaughtering large cattle, the amended regulations to be recommended for gazettal at the earliest possible date and come into operation on 1st October, 1952.

When these amendments become operative, the standard method of slaughter will be the captive bolt pistol and exemptions from the use of the pistol will be given only with the consent of the Commission. This consent will be forthcoming only in very exceptional circumstances.

PUBLIC BUILDINGS.

The number of plans examined in the calendar year was 706, which is 25 per cent. in excess of those for the preceding year. The increase was largely made up of churches, Sunday schools, and small halls, and more particularly of pre-school and infant welfare centres which more than doubled, increasing from 83 to 169. The majority of these latter are in receipt of Government assistance towards the cost of erection.

PUBLIC HEALTH BACTERIOLOGICAL LABORATORY.

During the past twelve months, the number of examinations was 64,317. There has been a marked increase in examination for drug sensitivity of organisms isolated and in the number of water specimens bacteriologically examined.

A number of new techniques have been explored and added to the general routine work in the laboratories. A modification of the Coombs test to the Brucella abortus agglutination test was introduced by the Assistant Director, Dr. Michael Wilson.

REVIEW OF PROGRESS IN PUBLIC HEALTH LEGISLATION.

Act.

The *Health* (*Radiological Examinations*) *Act* 1951 empowers the Chief Health Officer to require any person or group of persons to submit himself or themselves for radiological examination of the chest.

Regulations.

Food Appliance (Cadmium Plating) Regulations prohibit the use of Cadmium plating in appliances used in connexion with food.

The Private Hospital Regulations were amended.

(Note.—As from the 1st July, 1951, the administration of these regulations became the responsibility of the Hospitals and Charities Commission under the provisions of the *Health* (*Hospitals*) *Act* 1948.)

The Infectious Diseases Regulations were amended—

(*a*) to include special provisions relating to Rubella ;

(*b*) to provide for notifications of poliomyelitis and of typhus to be classified ;

(*c*) to include special provisions rendered necessary by the proclamation of a number of new "notifiable diseases" ;

(*d*) by revision of the schedule relating to exclusion of patients and contacts from school.

The Vaccination Regulations were revised.

The Cinematograph Operators Regulations were amended to reduce the minimum age for trainees.

The Fire Prevention Regulations were amended to bring certain details into agreement with the Uniform Building Regulations.

The Food and Drug Standards Regulations were amended as follows :—

(*a*) setting vitamin standards for certain fruit juices ;

(*b*) prohibiting the use of cocaine and heroin in patent medicines ;

(*c*) prescribing standards and labelling requirements for flavoured milk ;

(*d*) prescribing labelling requirements for imitation fruit and vegetable products ;

(*e*) permitting saccharine in cordials and summer drinks ;

(*f*) prohibiting any added substance in reconstituted cream ;

(*g*) prohibiting the use of solder and regulating the use of lacquer on internal surfaces of food containers, &c. ;

(*h*) permitting preservative in dehydrated potatoes ;

(*i*) permitting electrical bleaching of flour and prohibiting the use of chemical bleaching agents ;

(*j*) permitting preservative in pickled gherkins ;

(*k*) requiring a cautionary label on medicinal paraffin ;

(*l*) limiting zinc content of food containers ; but

(*m*) permitting use of galvanized-iron drums (10 gallons or over) for containing glucose, honey, &c. ;

(*n*) limiting the fat content of sausage meat ;

(*o*) classifying the definition of fruit jelly crystals, &c. ;

(*p*) rescinding the war-time standard for APC tablets of reduced size ;

(*q*) rescinding the requirement for declarations of constituent drugs in medicines—consequent on the operation of the requirements under the Patent Medicines Act.

Pre-school Centres Building Regulations were gazetted, setting out building requirements for Pre-school Centres of all kinds.

Regulations under the Infectious Diseases Hospital Act included tuberculosis as a disease which may be treated at Fairfield Hospital.

New Regulations relating to the manufacture and use of weed killers, &c., and revised Food Cleanliness Regulations were drafted, and are expected to come into operation shortly.

The "flock" provisions of the Offensive Trades Regulations and the slaughtering requirements of the Meat Supervision Regulations have also been reviewed, but the consequent amendments had not been gazetted at the end of the year.

PROCLAMATIONS AND ORDERS IN COUNCIL.

The provisions of the Health Acts were extended to all lands, premises, wharves, piers, and jetties—including Harbour Trust property—not within a municipal district.

The Metropolitan Meat Area was extended to include the southern portion of the Shire of Whittlesea, a small portion in the Kingsville district of the Shire of Werribee, and the southern portion of the Shire of Eltham.

The Bendigo Meat Area was extended to include the Borough of Eaglehawk and the township of Kangaroo Flat.

The Portland Meat Area was extended to include the town and the whole of the South and Central Ridings of the shire of Portland.

The coming into operation of the Kyneton and Corangamite Meat Areas was deferred to 1st September, 1952.

The following were declared Notifiable Infectious Diseases :—

Acute Rheumatism ;
Chorea ;
Dengue Fever ;
Diarrhoea of 48 hours duration in children under two years of age ;
Encephalitis—all forms ;
Filariasis ;
Homologous Serum Jaundice ;
Infective Hepatitis ;
Whooping Cough ;

and the official names of Psittocosis and Undulant Fever were altered to Ornithosis and Brucellosis respectively.

The Proclamation declaring Pre-school Centres to be "Public Buildings" was amended to include all crèches, kindergartens, play centres, and day and residential nurseries where children under six years are received for care or training.

Winlaton, Nunawading, was declared an appointed place under the Venereal Diseases Act—in lieu of Fairhaven.

Delegation of Powers.

To resolve a doubt as to the legal powers of Councils to undertake preventive measures against infectious diseases, the Commission's powers and duties as set out in Section 13 (1) (*a*) of the *Health Act* 1928, "to promote the prevention, limitation, and suppression of preventable diseases" were delegated to municipal councils.

AMENDMENT OF THE HEALTH ACT 1928.

The Commission desires to again stress the need for amendment of the *Health Act* 1928 in respect of a number of matters.

Many of these were summarized in the report for 1950–51, and to them the following are added :—

(*a*) Amendment of section 271 to ensure that an analyst's certificate will be accepted in court without the necessity of proving, in every case, that the certificate was in fact issued by an approved analyst.

(*b*) Provision for increase of the maximum fees chargeable by Councils in respect of meat inspection.

(*c*) Provision for increase of the fee chargeable by Councils for examination of plans of septic tanks.

(*d*) Revision of Division I. of Part VIII. (Infectious Diseases Hospitals) to clear up some anomalies introduced by numerous amendments.

(*e*) Removal of the "minimum weight" standard for calves in section 287 and substitution of a requirement of wholesomeness.

(*f*) Provision that plans verified by statutory declaration of the Municipal Engineer will be acceptable without appearance of the engineer as evidence in certain cases where the locality of an offence has to be proved.

(*g*) Provision for registration of all premises where food is manufactured or prepared for sale or sold ; and provision for the making of regulations with respect to the construction, lighting, ventilation, and sanitation of such premises,

STAFF CHANGES.

Appointments.

K. Brennan, M.B., B.S., D.P.H., Chief Health Officer.

R. J. Farnbach, M.B., B.S., D.P.H., Senior Health Officer.

G. V. Stafford, Secretary, General Health Branch, and Secretary of the Commission of Public Health.

N. H. Andrews, D.D.Sc., L.D.S., Deputy Director of Child Health (Dental).

J. L. Eabry, Secretary, Tuberculosis Branch.

A. H. McNaughton, M.B., B.S., Supervisor of Mass X-ray Surveys.

Reclassification.

C. F. Morrish, B.Sc. (Eng.), Senior Engineer.

Retirements.

G. E. Cole, D.S.O., M.B., B.S., D.P.H., Chief Health Officer.

J. Whitlock, Secretary, General Health Branch, and Secretary of the Commission of Public Health.

Respectfully submitted—

KEVIN BRENNAN
F. V. SCHOLES
WALTER SUMMONS
ALEX. M. KING
EDW. C. RIGBY
R. G. HOBAN
W. B. MONTEATH
} Members of the Commission

G. V. STAFFORD, Secretary,

Melbourne, 23rd September, 1952.

DIVISIONAL REPORTS.

REPORT OF DIRECTOR OF TUBERCULOSIS, VICTORIA FOR THE YEAR ENDED 31st DECEMBER, 1950.

In 1951, assistance received under the Financial Arrangement, 1948, continued to facilitate expansion of the activities in the joint campaign being conducted against tuberculosis by this State and the Commonwealth. Under the Arrangement, the Commonwealth reimburses to Victoria maintenance costs in excess of the expenditure in 1948 and all capital costs. In addition, Commonwealth Tuberculosis Allowances amounting to £472,704 were paid to Victorians affected with the disease. In the financial year ending on the 30th of June, 1952, capital expenditure on tuberculosis in Victoria amounted to £199,975 and maintenance expenditure to £1,015,360.

Mortality and Morbidity.

The death rate from tuberculosis continues to fall. Deaths from pulmonary tuberculosis in the calendar year 1951 numbered 359, a rate of 158 per million. This rate is the lowest recorded. The death rate per million in Victoria for pulmonary tuberculosis in the past five years has been :—

1947	306
1948	278
1949	250
1950	178
1951	158

There is no decline in the numbers of new cases of tuberculosis notified, nor the demand for institutional beds. The number of notifications in the calendar year 1951 was 1,034, a rate of 45 per 100,000 of population. A record number of beds were occupied in the sanatoria and chalets.

There are several reasons why a fall in morbidity rates is not disclosed by the statistical records despite the steady fall in mortality. The introduction of generous tuberculosis allowances by the Commonwealth, as mentioned in my report for 1950, has been an effective stimulus to notification. Intensification of case finding and improvement of diagnostic facilities, particularly radiological, has resulted in the discovery of many previously unrecognized cases. Recent therapeutic advances have widened the indications for institutional treatment; many patients are now admitted who formerly would have been considered unlikely to benefit from treatment in sanatoria, even if beds had been available. The increased provision of sanatorium beds has permitted a substantial prolongation of the duration of treatment of the individual patient, with corresponding improvement of the chances of permanent arrest of the infection. It is confidently anticipated that the combination of more complete notification, intensive case finding, improved methods and facilities for treatment, and progress of the B.C.G. immunization campaign will achieve substantial reductions in tuberculosis morbidity in Victoria within the next few years, which will be reflected in fewer notifications of new cases, and a lessened demand for institutional beds.

Sanatoria and Chalets.

Institutions under departmental control accommodated 951 patients as at the 30th June, 1952. The Repatriation Commission provides an additional 400 beds. One thousand three hundred and fifty-one beds are available for tuberculosis in Victoria (3·8 per annual death). During 1951, admissions to institutions more than kept pace with new demands, allowing substantial reductions in the accumulated waiting list.

The tuberculosis wards in Mint-place Annexe were closed on 28th August, 1951, since they were required by the Cancer Institute. The loss of these 79 beds was partly offset by the provision of two wards accommodating 50 patients at the Fairfield Hospital. The Tuberculosis Branch is grateful to the Board of Management of Fairfield Hospital for its co-operation. Completion of modern nurses' quarters at Gresswell and Heatherton sanatoria made available additional wards, previously used for staff accommodation. As a result, 75 more beds were provided during the year despite the closure of Mint-place Annexe.

Two consultant physicians were appointed in 1951 : Dr. E. Clarke, M.D., F.R.A.C.P., to Greenvale and Dr. T. H. Steel, M.B., M.R.C.P., to Heatherton. These consultants visit the sanatoria weekly and their services have been greatly appreciated by the patients and the medical staff.

The programme of medical conferences at the sanatoria and Bureau has been greatly expanded by the Deputy-Director, Dr. D. B. Rosenthal. These conferences are now held weekly for ten months of the year. They are attended by medical officers from all sections and institutions of the Branch and by the consultants, and are open to all doctors interested in diseases of the chest.

Systematic training of nurse assistants has been placed on a firm basis. The first graduation ceremony was held at Gresswell Sanatorium on 27th July, 1951, when certificates were presented to the successful candidates by the Honorable W. O. Fulton, Minister of Health. Post-graduate training of registered nurses for the Diploma of Tuberculosis Nursing continues; three nurses obtained their Diploma during the year.

Highly successful exhibitions of patients' handcrafts were held at Gresswell and Greenvale sanatoria, as described in the appended reports of the Medical Superintendents.

Chest Clinics and Bureaux.

The Prahran Bureau, previously part of the health services of the Prahran City Council, was brought under control of this Branch in March, 1951. A branch of the Bendigo Bureau was opened at the Castlemaine Hospital in November, 1951.

There were no innovations in the conduct of the Bureaux, whose activities are described in the attached reports. There were 31,795 attendances at the Central and Prahran Bureaux, and 6,528 at the extra-metropolitan Bureaux. Four hundred and ninety new cases of tuberculosis were discovered in the Bureaux in 1951, among 9,029 persons reporting for investigation.

Chest X-ray Surveys.

Chest X-ray surveys were conducted throughout the year in city and country. Miniature chest films were taken of 277,938 persons. Among these 767 persons

showed radiological evidence of possibly active pulmonary lesions; in 187 of them the diagnosis was confirmed bacteriologically.

The Chest X-ray Surveys Section has transferred to permanent quarters at Milton House, Flinders-lane, Melbourne.

A highly successful campaign was held in the Melbourne Town Hall during Health Week, 19th to 26th October, 1951. Twenty-one thousand and sixty persons were examined during the ten days of the survey. Much of the success is to be attributed to the effective publicity organized by the City Health Officer, Dr. Philip Gilbert.

Rehabilitation.

The work of the Rehabilitation Section expanded to the benefit of patients in sanatoria and after discharge. There is close liaison between the Rehabilitation Medical Officer of the Tuberculosis Branch and the Commonwealth Departments of Social Services and of Labour and National Services.

Suitable employment was obtained for 150 ex-patients, and training in suitable occupations for 157. As at the 31st of December, 1951, 120 persons were in training. The Victorian Tuberculosis Association has given much practical help in the rehabilitation of patients.

Immunization Against Tuberculosis.

In February, 1951, a campaign was initiated to offer B.C.G. vaccination to all Mantoux positive school children in Victoria aged thirteen years or more within the succeeding two or three years. With the co-operation of the Education Department, parental consent is sought to Mantoux test and, where indicated, to immunize children. Parents have freely availed themselves of this opportunity, approximately 90 per cent. consenting to the procedures. In 1951, 7,619 school children were given B.C.G. vaccine. It is intended to intensify efforts in this field so that all secondary schools in Victoria will be covered within two or three years.

General.

Reports of the various sections and institutions of the Tuberculosis Branch, and statistical tables are appended.

CLINICAL AND BUREAUX SERVICES.

Central Chest Clinic and Tuberculosis Bureau, Melbourne.

Deputy-Director of Tuberculosis, Diagnostic Services: Dr. H. M. James.

There have been no significant changes in the work of the Central Chest Clinic during the past year. There has, however, been some decline in the number of patients referred for investigation and advice by outside medical practitioners. This is, undoubtedly, due to the extensive use of the facilities provided by the Chest X-ray Surveys Division, many patients and doctors being content to receive an "all clear" report from that Division.

The total number of cases of pulmonary tuberculosis in that part of the metropolitan area under the supervision of the Central Chest Clinic is now 6,200. Although many of these cases (40 per cent.) need yearly supervision only, there is still sufficient work to occupy fully the time of the medical and nursing staff of the Central Clinic.

It is anticipated that the actual number of cases under supervision will increase rather than decrease. With concentration on case finding throughout the State many more people with tuberculous infection, whether active or quiescent, are being discovered. With the falling death rate this must increase the total number of patients under supervision. There is, as yet, no falling off in the number of notifications.

Through the Central Chest Clinic during 1951 seven hundred and ninety-eight (798) cases of pulmonary tuberculosis were notified. These were about evenly divided, there being 396 males and 402 females. The age distribution still shows the greatest number in the 20-30 year female group, there being 146 of these. Following are the detailed figures:—

Central Chest Clinic Notifications, 1951.

Age Group.	Male.	Female.
0–10 years	6	2
10–20 ,, ...	45	50
20–30 ,, ...	81	146
30–40 ,, ...	54	84
40–50 ,, ...	74	70
50–60 ,, ...	76	26
60–70 ,, ...	50	16
Over 70 years	10	8
	396	402

It will be seen that of the notified cases under 40 years of age, 186 were males and 282 females whilst in the group over 40 years of age there were 210 males and 120 females.

Medical Officers from the Central Clinic visit patients in their own homes on two days weekly. These patients may be awaiting sanatorium admission or may have been discharged and, for one reason or another require medical attention. A consultative service for the general medical practitioner is available, also the services of an experienced consultant in cases of difficulty. These services have been much appreciated.

The B.C.G. Clinic is in operation for two full days every week. Thirty to 40 children have been immunized weekly since the inception of this work here on 1st August, 1949, and in all over three thousand children have been vaccinated with B.C.G. There is no record of a single case of tuberculous meningitis or miliary tuberculosis amongst the vaccinated children; and there have been no complications of a serious nature from the B.C.G. itself.

Chest Clinic and Tuberculosis Bureau, Prahran.

Tuberculosis Officer, Dr. S. C. Wigley.

This Clinic, prior to March, 1951, formed part of the health services of the Prahran City Council. At that time the Clinic was brought under the control of the Department of Health.

The medical staff consists of one full-time medical officer and a part-time consulting physician. The area served by the Clinic is the City of Prahran with a population of 63,000.

The activities of the Clinic fall into three categories:—

(1) A consulting service in general thoracic medicine.

(2) The prevention, diagnosis, and treatment of pulmonary tuberculosis.

(3) A micro-film diagnostic service.

In the first instance patients are referred to the Clinic by local medical practitioners.

At Prahran approximately 200 cases of pulmonary tuberculosis in various stages of the disease are under observation and nearly 1,000 contacts of these cases are also under its supervision. Diagnostic measures include the consulting service mentioned above, mass micro-radiography and the examination of contacts of Mantoux positive persons.

Prevention of the disease is carried out by education of the patients and social surveys of the home done by Sisters at the Clinic who regularly visit the homes of patients with tuberculosis who are undergoing domiciliary care. In addition, Mantoux negative contacts of tuberculous patients are offered B.C.G. vaccination which is carried out at the Clinic.

The Clinic shares with the Central Tuberculosis Bureau a rehabilitation service, an almoner service, and an occupational therapy service. A home help service and a boarding out service are proposed for the future.

Chest Clinic and Tuberculosis Bureau, Bendigo Base Hospital, Bendigo.

Tuberculosis Officer : Dr. K. G. Kerr.

There were 53 notifications of tuberculosis in the Northern Health Area, 23 being from the City of Bendigo and 30 from the rest of the area. Twenty-four of the notifications were from the Bendigo Chest Clinic, 17 from various hospitals, and 12 from private practitioners.

Of the 53 notifications, 28 were males and 25 females. There were 46 pulmonary cases, 5 cases of tuberculosis spine, 1 a " thoracic sinus " and 1 case of exudative pleurisy. Twenty-seven of the 53 notifications were of persons over 40 years of age.

Of 35 pulmonary cases, whose stage of disease at notification is known, eleven could be said to be in the first stage.

There were 21 deaths from pulmonary tubercuIosis and one death from tuberculous peritonitis. Of the pulmonary cases, 17 were males and 4 females. Eight of the pulmonary deaths were of residents of the City of Bendigo, thus giving a death-rate of 2·8 per 10,000 of estimated population of 28,000. Last year the rate was 3·6 and in the five-year period 1941–1945 Bendigo had an official death-rate from pulmonary tuberculosis of 5·9 per 10,000, as compared with rates of 4·1 for Melbourne, 4·0 for Ballarat, and 3·5 for Geelong. Six deaths were of persons who were not known to the Chest Clinic as cases of pulmonary tuberculosis before death. Two men who were known to be suffering from silicosis complicated by tuberculosis revealed by the presence of microbacterium tuberculosis in the sputum were certified as having died from other causes, of cardiac origin.

Seventeen of the 21 deaths from pulmonary tuberculosis were of persons over 40 years, 9 persons being over 60 years. The youngest male was 39 years of age. Only two deaths occurred of patients in the Chalet.

Deaths.

—	Males.	Females.
Under 10 years	..	..
10–19 years	..	..
20–29 ,,	..	1
30–39 ,,	1	2
40–49 ,,	2	..
50–59 ,,	6	..
60–69 ,,	5	1
70–79 ,,	2	..
80–89 ,,	1	..
	17	4

Excluding patients whose disease has been arrested for five years or more, the following table illustrates the present Clinic register :—

Number of cases of pulmonary tuberculosis attending Clinic	117
Number of cases of pulmonary tuberculosis in Bendigo Chalet or in Sanatorium	30
Number of cases of pulmonary tuberculosis in Bendigo and immediate environs under own doctor or Repatriation Department	89
Number of cases in rest of Northern Health Area not attending Clinic	103
Number of non-pulmonary cases	25
Number of known cases of tuberculosis (Northern Health Area) on register	364
Number of patients who have been registered but now reside outside the Northern Health Area	269

Attendances for the year at the Chest Clinic were as follows :—

Attendances for the year at the Chest Clinic.

—	Male.	Female.	Under 14.		Total.
			Male.	Female.	
Number of new applicants for investigation	280	321	80	76	757
Re-attendances	738	1,039	301	380	2,458
Total attendances	1,018	1,360	381	456	3,215
Application for Sanatorium admission from outside	4	13	..	..	17
Examinations	561	577	127	155	1,420
Evening clinics—Total attendances	119	165	8	29	321
Patients found with active tuberculosis	12	9	1	1	23
Cases passed for Austin	..	4	..	..	4
Cases passed for Country Chalets	9	20	..	..	29
Bureau cases transferred to Sanatoria or Chalets	13	13	..	..	26
Sanatorium cases transferred to Bureau	7	10	..	..	17
Contacts—					
Number of new contacts examined	39	67	35	34	175
Number of infecting cases in relation to new contacts	32	34	..	..	66
Number of re-examinations	91	169	65	90	415
Number of contacts found with active tuberculosis	1	1	..	..	2
Skin Tests—					
Number of Mantoux or Vollmer tests	252	410	138	170	970
Number of positive tests	143	210	73	84	510
Mantoux tests in schools	..	..	..	..	1,553
Number positive	..	..	..	..	127
(High proportion of secondary school children)					

Attendances for the year at the Chest Clinic—continued.

—	Male.	Female.	Under 14.		Total.
			Male.	Female.	
B.C.G. Vaccination—					
Number of persons vaccinated	24	109	33	40	206
Total attendances for vaccination	92	420	164	183	859
Children and adults vaccinated in schools after Mantoux tests	..	..	..	..	1,259
Pneumothorax Refills—					
Number of persons undergoing A.P.	1	6	..	..	7
Total A.P. Refills	20	102	..	..	122
Taken on for A.P.	1	1	..	..	2
Discharged from A.P.	..	4	..	..	4
X-ray Examinations—					
Large films	639	685	158	191	1,673
Micros	..	..	..	..	..
Screens	17	83	..	..	100
Gastric lavages done	3	13	..	..	16
Sputum examinations	238	94	3	..	335
Home Visits—					
Medical officers	..	..	..	..	..
Nurses' first visits	10	16	1	2	29
Nurses' re-visits	252	196	..	..	448

B.C.G. Vaccination.

Regular sessions for B.C.G. vaccination have been held at the Clinic and ten secondary schools in Bendigo were visited. Two hundred and six persons were vaccinated at the Clinic and 1,259 at schools. Since 1948, 2,425 individuals have been vaccinated in Bendigo.

B.C.G. Vaccination for 1951.

Number of people vaccinated at Clinic (including trainee nurses)	206
Vaccination in secondary schools ..	1,165
Vaccination of student teachers ..	94
Total number vaccinated	1,465
Number not re-tested	1,354
Number converted of 111 tested ..	108
Number of convertors still positive after twelve months of 185 tested ..	163

Tuberculin Test Survey of Primary Schools.

Apart from Mantoux testing and B.C.G. vaccination in secondary schools, Vollmer and Mantoux testing in the primary schools in shires adjacent to Bendigo was conducted and the Shires of Marong and Strathfieldsaye were covered. Twenty-three schools were visited. In the previous year 21 primary schools in Bendigo, Eaglehawk, and immediate environs had been visited.

In the Shires 552 children were tested and there were twelve reactors, 2·1 per cent.

Thus during 1950 and 1951 it has been possible to make a tuberculin-test survey of children in Bendigo. This was a repetition of the survey made in 1948. This time there were fewer pre-school children brought for testing.

It was thus possible to follow up, two to three years later, some of those who reacted in the first survey, and to note some conversions. In 1948 in the Bendigo city area there were 238 reactors among 6,100 tested and in 1950–51 there were 192 reactors among 4,913 tested.

Of 84 original reactors who were re-tested, 81 again gave a positive reaction and three appeared to have reverted to a negative state. Twenty-nine children who were found to be negative in 1948 had converted to a positive reaction and 77 new positive reactors, who were not previously tested, appeared in the second survey. As a result of family investigation following the survey, only one new active case of pulmonary tuberculosis was found. In 1948, five new cases of active tuberculosis were discovered as a result of tuberculin-testing of school children. No children were found with active disease.

In eighteen small schools there was a complete absence of any infection.

Branch Clinic.

In November, a branch clinic was held at the Castlemaine Community Hospital and it is intended to hold the clinic one day every three months or more often if considered necessary.

The visiting nurse for the North-Western Area arranges appointments and attends with the Tuberculosis Officer on the day of the session. In this way the town of Castlemaine and adjacent shires will be served.

Silicosis.

There was only one death certified as being due to silicosis ("pulmonary fibrosis") but two of the deaths from tuberculosis were of miners who had silicosis also. In addition, three other deaths were of miners with silicosis and tuberculosis (two with positive sputum) but the deaths were registered as being due to heart disease, and four more deaths from cardiac or circulatory disease were of miners known to have silicosis.

Twenty-two cases of silicosis were notified from the Clinic as cases of industrial disease, together with four cases of silicosis complicated with tuberculosis in two of which tubercle bacilli were found in the sputum.

Sixteen examinations of applicants for a Miners' Phthisis Allowance were made. Ten had silicosis, three had silicosis complicated by tuberculosis, in two of which tubercle bacilli were found in the sputum (as above) and in three instances there was no evidence of silicosis.

There were 139 registered cases of silicosis at the Clinic, including 24 complicated by tuberculosis, in eight of which tubercle bacilli have been found in the sputum.

Tuberculosis Bureau, Ballarat.

Tuberculosis Officer : Dr. G. T. James.

The Clinic continues to play a useful part in public health activities. The medical men throughout this district make full use of it for investigation of doubtful cases. The public also are much more conscious of its value, and most contacts are only too willing to avail themselves of periodical examination.

The numbers attending the outpatient Clinic make it difficult to arrange refills for artificial pneumothorax patients during the Clinic hours. Hence these are all carried out at the chalet at a separate session. This arrangement is much more satisfactory also from patients' point of view.

Altogether 191 refills were given for the year.

Chest Clinic, Geelong.

Tuberculosis Officer : Dr. D. N. L. Seward.

The total attendances during 1951, numbered 1,842, again showing a considerable increase from previous years. This number included, in addition to contacts, 297 new cases for investigation and of this number sixteen were found to be suffering from active tuberculosis.

Artificial pneumothorax formed part of the treatment in eight patients, and two patients were treated with artificial pneumoperitoneum. A total of 223 refills were given.

The use of B.C.G. vaccine for the immunization of tuberculin-negative contacts was continued with a 100 per cent. conversion rate.

In addition to assisting with this work in the Clinic, the Clinic Sister has made 416 home visits.

INSTITUTIONS

INSTITUTION ACTIVITIES.

Gresswell Sanatorium.

Medical Superintendent : Dr. D. B. Rosenthal.

1. The total number of patients admitted was 195. There were 186 discharges and fourteen deaths. The average daily number of patients was 160 and average duration of stay was 322 days.

2. *Treatment.*—Chemotherapy has been used for many patients, the drugs used including Streptomycin, P.A.S., and various preparations of Thiosemicarbazones. In association with the Bacteriological Laboratories of the Health Department at the Queen Victoria Annexe, full bacteriological coverage of these patients has been made, and projects have been commenced to attempt to co-relate sensitivity tests with clinical findings. These will be continued in 1952.

Routine electrocardiography on all new patients has been continued, and results have been compared with those from other centres.

3. Artificial pneumothorax and artificial pneumoperitoneum have been used where indicated, the number of patients receiving this treatment being 36 and four respectively. These figures do not include collapse therapy commenced in the previous year and continued at the same time. Major surgical procedures were performed at the Austin Hospital, whilst minor surgical treatment including adhesion section, phrenic nerve crush and bronchoscopy, were carried out at both Austin and the Fairfield Chest Unit.

Medical conferences were held at approximately six-weekly intervals, and were attended by surgical consultants, members of the Tuberculosis Branch of the Health Department, and visiting doctors.

4. Activities in occupational therapy under the control of the social club continue to maintain a satisfactory standard, and art therapy (under the control of Mr. F. L. Coles) has been active through the year. An interest in photography has been maintained, the Medical Superintendent giving several lectures to the patients on composition and technique.

The occupational therapy hut is still not available for the use of the patients, but there are indications that 1952 will show real progress in this matter. The quarterly magazine of the social club "Weerona" has maintained a high standard, and its production forms a regular part of the activities of the social club.

5. The services of Mrs. Lindsay as Instructress in handcrafts to the Sanatorium, have been made available by the Australian Red Cross Society. Several modifications in handcrafts have been introduced. Plastics have been very popular during the year. Mr. F. Glover was appointed Therapy Officer in succession to Mr. F. Box at the beginning of the year. Exhibitions of handcrafts were held in June and December respectively, and the displays were viewed by a large number of visitors and ex-patients.

6. The ex-patients' Association has maintained its regular activities throughout the year, and met twice at the Sanatorium, the meetings being coincidental with the exhibitions of handcrafts promoted by the social club.

7. The work of the three Sanatoria in the Tuberculosis Branch of the Health Department as training centres for Nurse Assistants and Post-Graduates has continued. The first annual examination for Nurse Assistants whose course terminated in June was held at Gresswell, the examiners being Miss H. Shanahan, Dr. K. Cowen, and Dr. D. B. Rosenthal. Twenty-six passed the examination for Senior Nurse Assistants. At the graduation ceremony, the Minister for Health, Mr. Fulton, presented certificates to the successful candidates, congratulating them on their success.

8. During the year, Dr. R. E. G. MacLean of the Mental Hygiene Department has continued to visit the Sanatorium as Consulting Psychiatrist, and most of the patients admitted were interviewed by him. Further development of the advisory service of this kind is hoped for in the future. Other specialists' services were supplied regularly by Dr. E. Day, Oculist, Dr. Walter Williams, Laryngologist, and Mr. F. P. Byrne, Dentist, respectively.

9. *Staff Quarters.*—During the absence abroad of Matron D. Davison, remodelling of the Matron's quarters as planned was carried out, and were available to Matron on her return. New quarters for the domestic and male staff are in the process of construction.

10. In the latter half of the year, a class in English for New Australians was conducted with the assistance of the Universities Commission, but attendance was disappointing. During this period supervision of instruction passed from Commonwealth to State control but, owing to the unsatisfactory attendances, the classes were discontinued at the end of the year, but will be recommenced should demand arise.

11. Matron Davison went abroad on leave from the Department for six months from March to September, during which time she visited U.K. and West Europe. Whilst in England, Matron Davison visited many tuberculosis institutions including Papworth Village Settlement, Newstead, Notts and Pinewood Sanatorium, Berks. Matron resumed duty in October.

A visit to the Sanatorium was paid by an English physician, Dr. Nagley, of Grove Park, London. He was making a survey of tuberculosis institutions in the Commonwealth, on behalf of British Tuberculosis Associations. Whilst here he was the guest of the Medical Superintendent, Dr. Rosenthal.

12. The following are projected works, some of which are in progress now and should be available in the coming year :—

(*a*) Three cottages for use of domestic and outdoor staff.
(*b*) New houses for the Medical Officer and the Secretary.
(*c*) New toilet facilities for visitors.
(*d*) Linen room.
(*e*) The Occupational Therapy building is to be called " The Olney Rehabilitation Centre ".
(*f*) It is also anticipated that the toilet sterilizers which have been commenced will be available during 1952.

Renovation of the Administration Buildings, and the domestic quarters is projected for 1952.

In conclusion, I would state that the routine work of the Sanatorium has been carried out satisfactorily ; and I wish to record my appreciation of the support and assistance rendered by the Matron, members of the Medical and Nursing Staff, and the Secretary.

Greenvale Sanatorium.

Medical Superintendent : Dr. M. E. Playle.

Patients.

Treatment has continued along the same lines as in 1950. Routine rest and exercise has been supplemented by special treatment : antibiotics, various forms of collapse therapy, and by surgery in selected cases.

Regular visits by Consulting Specialists have continued.

Patients' Library.—Greenvale is always grateful to the Thomas Baker, Alice Baker, and Eleanor Shaw Benefactions for help in establishing this splendid library for patients. Dr. G. Cole supplies the library with the Canadian *Geographical Magazine*, and Greenvale is grateful for this kindness.

Miss E. Robartson has continued as Librarian during 1951 and her meticulous care of the books and personal interest in the patients' reading has been outstanding.

Handcrafts Instruction has been given by Miss Jean Halls, appointed early in 1951. Miss Halls has been the only Instructress for 150 patients and her task has been exceedingly heavy.

Dressmaking Tuition was continued by Mrs. Margaret Hillyard until November, 1951, when she was compelled to relinquish this service for a time. Mrs. Hillyard's place was taken by Mrs. D. Snow, who had been, some years ago, the first, and voluntary, instructress in handcrafts to patients.

Milliner.—Appointment of a milliner was approved but, unfortunately, no applicant has come forward. Nevertheless the value of tuition in millinery was obvious at the display of patients' handcrafts later in the year when an ex-patient made all the hats worn in a mannequin parade.

Tuition in Typing and Shorthand was made available to suitable patients in July, 1951, when Miss Best was appointed to teach these subjects.

Display of Patients' Handcrafts was held on 28th October, 1951. The exhibition was officially opened by Miss Jeanette Brooks, in the absence, through illness, of her mother, Lady Brooks, wife of the Governor of Victoria. The feature of the exhibition, was a mannequin parade, when patients displayed the clothes, millinery, and accessories they themselves had made. It was felt that articles of dressmaking lose so much of their special character when displayed on dress stands, and that, for exhibition, the clothes should be worn. From the very appreciative remarks of our guests, we feel sure this departure from the usual display, demonstrated more clearly the practical help to be obtained from the handcrafts and dressmaking tuition.

Entertainments.—During 1951, patients had weekly picture entertainment ; concerts, and a number of excellent plays by visiting amateur dramatic companies.

Staff.—Every effort is made to make staff comfortable and happy. Their health is especially cared for by complete examination on the day of commencing duty and by daily staff parade.

New quarters for Nursing Staff were occupied during 1951. These quarters comprise single rooms, each with hot and cold water, four sitting-rooms with attached sun-rooms, laundries, drying-rooms and pantries, the full equipment including stovettes and refrigerators. Seven houses for single male staff were nearly completed during 1951.

Nurse Assistants have had special tuition in tuberculosis nursing, by Sister Ott, Tutor Sister. Five candidates were presented for examination in May, 1951, and later received certificates, from the Honorable the Minister of Health, Mr. W. O. Fulton, at the Graduation Ceremony held at Gresswell Sanatorium.

Sister Alison Frith was the only post-graduate candidate from Greenvale. Sister Frith graduated with distinction.

Staff travelling facilities were improved during 1951. Two Vanguard cars made transport to the station more comfortable, and an additional Progress bus, direct to the City at 1.45 p.m., filled an urgent need.

General.

Occupied Beds increased in 1951 from 106 to 150.

British Medical Association.—A very successful meeting of the B.M.A. was held at Greenvale on the 23rd June, 1951, about 75 visitors attending. Visitors were invited to inspect the Sanatorium during the late morning. Buffet lunch was served, and in the early afternoon the meeting was held in the concert hall. Members of the Tuberculosis Service had been invited to join in presenting cases so that a comprehensive survey of tuberculosis was given. This included cases both medical and surgical, tomography, electrocardiography, physiotherapy, bacteriology, and domiciliary care of patients. A number of ex-patients attended for demonstration.

Each visitor was given an attractive brochure, comprising a plan of the Sanatorium with data, a photograph of the Sanatorium, and routine precautions for the protection of staff.

After the meeting, visitors were entertained at a review of activities within the Sanatorium—a short two-act play presented by patients, and a color film of Greenvale.

Bishop McKie, Bishop of Geelong, visited Greenvale on two occasions for Confirmation Service and to consecrate an Altar.

X-ray Examinations.—One thousand eight hundred and fifty-nine films of patients and staff, were taken during the year. Miss King, X-ray Technician on Gresswell Sanatorium Staff, attended Greenvale one day weekly for seven months of 1950. We were most grateful to Miss King for her kindly help.

We wish to place on record our grateful appreciation of the kind, practical help given us, throughout the year, by Major Walter Murphy, a resident of Greenvale.

Relevant Statistics.

Admissions	.. .. ..	145
Discharges	.. .. ..	96
Deaths ..	.. .. ..	6
Artificial Pneumothorax	.. ..	16
Average duration of stay of patients		55 weeks.

Heatherton Sanatorium.

Medical Superintendent: Dr. B. Clerehan.

Bed States.

At commencement of the year, the number of beds available was 165; this rose to 175 in August when abolition of the patients' diningroom made extra beds available. This number comprises:—

North Block	70
Old Wings	83
Verandah Beds	22

Number of admissions, including patients returned from long-term stay in other institutions, was 245. There were twelve deaths, and 222 discharges, including 25 irregular discharges. Average stay in hospital of discharged patients was 347 days.

Medical Treatment.

In recent years, various surgical procedures and chemotherapeutic régimes have been added to the basic treatment of rest and graduated exercise, and during this year use of these measures has been extended, as reflected in the increase in number of patients (33) undergoing major procedures at other institutions, often multiple operations being required.

Therapeutic pneumothorax was induced and maintained in about seventeen patients.

Medical conferences, attended by visiting physicians and surgeons and medical officers from other sanatoria, were held at six-weekly intervals, for the purpose of discussing problems in treatment, with particular reference to surgical measures. The appointment of Dr. T. Steel as Consultant Physician, visiting the Sanatorium weekly, has been a valuable measure. The resident medical staff has the responsibility of treatment of about 200 patients, a number which will rise to 245 during 1952; and also of the medical care of about 150 staff; this necessitates personnel adequately trained in general medicine as well as tuberculosis, and means of maintaining such standard by access to post-graduate facilities. Visiting specialists in ear, nose, throat, gynaecology, ophthalmology, and dental services made regular visits to the Sanatorium, providing extremely valuable ancillary services.

Staff.

Nursing and domestic staffs have been maintained at approximately establishment strength; the fact that many of the nurse assistants and domestic staff serve but briefly, reduces efficiency somewhat, and throws an added burden on Matron, Deputy-Matron, and the more permanent staff members.

It is of interest to note that the twelve nurse assistants who graduated as senior nurse assistants, in June, after completion of the first course of training, are still on the staff.

General administrative work including management of the large staff, general and medical supplies, buildings, and equipment has been satisfactorily continued by the Secretary.

Buildings.

The long awaited opening of the new Nurses' Home has been a major event in this year, replacing, as it does, inadequate facilities by exceptionally fine and commodious quarters providing single room accommodation for nursing and domestic staff; a considerable inducement to stability is thus obtained, the satisfactory effect of which is already apparent.

The enlargement of staff makes possible the opening of another 70 beds, and also makes available a suitable building for a centralized administration block, replacing the present unsatisfactory temporary arrangement, and at the same time releases a wing for more patients' beds.

Arrangements are in hand for providing modern radiological and laboratory facilities, essential to this institution.

The boiler house has been completed and functions satisfactorily.

Red Cross.

The invaluable service of Red Cross personnel to patients continued at its usual high level. Full library service, regular "outings" for patients, shopping service, &c., as in previous years contributed to patients' morale.

Patients' Social Club.

This organization continues to serve a useful purpose in the community and recreational life of patients, a necessity with long-term illness.

Rehabilitation Service.

This department provided adequate facilities for re-training and almoner service as required, close liaison being maintained by regular visits of the almoner, with visits from Dr. O'Rorke as necessary.

Austin Hospital.

During 1951 the work of the Sanatorium Section of the Austin Hospital continued with the main emphasis on thoracic surgery. Even with three surgical teams each working one-half day per week, the waiting list for major surgery for females continues to be approximately five months; for males, however, it is comparatively short. A more rapid turnover has been made possible by returning patients to sanatorium three to five weeks after completion of surgical procedures.

Analysis of the total number of various operations performed shows that resection of lung tissue is playing a larger part in the present-day treatment of pulmonary tuberculosis.

During the year arrangements were made for follow-up of ex-surgical patients by Austin Hospital Medical Officers attending the Central Chest Clinic one-half day per week. This has enabled a higher percentage of these patients to be followed up, and it is hoped that some results will be published in the near future.

Because of nursing staff shortages 53 adult beds remain closed.

In the childrens' ward the number of beds has been increased to 30, and the unit now occupies part of the 3KZ Block. Playground facilities are proposed and it is hoped that this work will be completed in 1952. A trained kindergarten instructor attends each morning for children under five years of age, and those over five years have school. The assistance of a further part-time school teacher would be welcomed

A Summary of the surgical work of the Unit is shown hereunder :—

Type of Operation.	Total Number of Operations.	Patients.	Male.	Female.
Thoracoplasty	105	56	29	27
Anterior Stage Thoracoplasty	5	5	1	4
Pneumonectomy and Thoracoplasty	28	28	6	22
Lobectomy	22	22	10	12
Post Lobectomy Thoracoplasty	1	1	..	1
Monaldi Drainage ..	5	5	2	3
Phrenic Nerve Operations—				
Phrenic Crush ..	22	22	16	6
Phrenic Re-crush ..	1	1	..	1
Phrenic Avulsion ..	..	..	..	..
	23	23	16	7
Thoracoscopy	37	37	13	24
Thoracoscopy and Adhesion Section	34	34	16	18
Thoracotomy	1	1	1	..
Bronchoscopy	166	166	48	118
Drainage and Plastic Empyema	3	3	3	..
Cavernostomy	5	5	2	3
Extra Pleural Pneumothorax	3	3	..	3
R. Scapulectomy ..	1	1	1	..
Drainage of Sub-scapular Space	1	1	1	..

Statistics.

	Male.	*Female.*
Total number of admissions ..	141	161
Total number of discharges ..	131	149
Total number of deaths ..	11	5

Report on Mint-place Annexe.

Mint-place Annexe was opened on 4th September, 1947, and closed on 28th August, 1951.

During this time 385 patients were admitted, which with re-admissions amounted to a total of 452 admissions. Average stay of patients was 250 days.

Types of cases admitted :—

Male and female patients.
Sanatorium and chronic cases.
Short-term cases for minor surgery.
Children from ten years of age ; primary and post-primary infection.
Tuberculous pregnant women.
Emergencies.

Bed capacity of Mint-place was 79 beds, of which, during the years 1950 and 1951, 4 beds were reserved for short-term surgery admissions and 16 to 20 for the admission of children.

Patients discharged from Mint-place Annexe attended for an average of two years following discharge, as out-patients, every two to three months, which meant an average of 80 patients being supervised in this way, of whom 25 per cent. received pneumothorax refills.

Twenty-four pregnancies were supervised in 23 patients, of whom 14 were in-patients and 9 out-patients. All pregnancies ended with normal confinements and there was 1 neonatal death from gastroenteritis.

During these four years, 48 deaths occurred, some within a few days of admission.

Forty-nine patients were referred for major surgery to Austin Hospital and Alfred Hospital and re-admitted for convalescence.

An average of 25 X-rays were taken weekly and 30 to 40 patients screened weekly.

During the year 1950 a school was started for the children's ward and a part-time teacher employed. School was from 9 a.m. until 12 noon daily, with a break in mid-morning. The children were brought into the class room on cane lounges and received tuition lying on the lounges. Tuition was completely individual and the amount of work each child could do was discussed currently between the teacher and myself.

Minor surgery was started in May, 1950. It included :—

Thoracoscopy.
Pneumolysis.
Bronchoscopy.
Phrenic crush.
Pleural lavage.

There were 180 such procedures carried out until the time of closing down, at sessions held once or twice a week according to the number of cases.

Pneumothorax.—Approximately 110 inductions were done, of which 78 were carried on at least until thoracoscopy ; 76 pneumothoracies were continued for a minimum of one year, average two years. Of these, 8 were bilateral. Of these 76 pneumothorax cases, 61 are out of sanatorium and well and 15 are still in sanatorium. There were no deaths in these pneumothorax cases. Eight of them came to major surgery on the side of the pneumothorax and of these 8 cases, 3 cases were done for empyema following pneumothorax : 2 tuberculous and 1 mixed empyema. Ten pneumoperitoneums were done and there was 1 death in these patients.

All patients received dental treatment, including conservative extractions, dental surgery, and dentures as required at the Dental Hospital, Melbourne. An average of four to six patients went to the Dental Hospital weekly, either by ambulance or taxi, and operators came to Mint-place Annexe as required in cases of very sick patients.

Red Cross Activities.

Red Cross supplied occupational therapists, who attended daily, a hospital visitor, and voluntary workers who provided a canteen service. Occupational therapy included leather work, basketry, weaving, and felt work. The Hospital Visitor was in charge of the hospital library and did all the patients' shopping and arranged for broadcasts for the patients. These broadcasts were (*a*) educational, (*b*) entertainment. Some of the educational broadcasts were given with the help of the Council for Adult Education, and the entertainment broadcasts were guest speakers such as visiting artists and noted personalities from overseas. The Hospital Visitor also arranged an exhibition of pictures from the National Gallery, at Mint-place Annexe, and arranged outings for patients allowed to go for drives.

Patients had a half-hour broadcast weekly on the problems, pathology, and treatment of tuberculosis, during which sessions their questions about tuberculosis were answered.

Picture nights were held once a week on each floor. The pictures were supplied by the hospital auxiliary, through contract with Metro-Goldwyn-Mayer and were shown by members of the Apex Club, using their own projector.

Fairfield Chest Unit.

Medical Officer : Dr. M. Renth.

There were 150 admissions and 167 discharges to Mint-place Annexe and Fairfield Chest Unit. These include short-term surgical cases, whose stay was from two days to three weeks.

In this period four deaths occurred and 26 pneumothoraces (of which three were bilateral) and five pneumoperitoneums were conducted.

Eleanor Shaw Chalet and Dunstan Chalet.

Visiting Physician : Dr. S. C. Wigley.

This report is for the twelve months ending 30th June, 1952.

These Chalets are primarily for the accommodation of aged and indigent tuberculosis patients. The conditions governing admission to the Chalets are that the patients should be ambulant, sputum-positive, and beyond the reach of medical or surgical conversion, and their social state should prevent their management in the home.

The nature of the tuberculous condition in these circumstances ensures that these patients are long-term inmates of the institutions. Discharge is rarely made on medical grounds. Death or disciplinary discharge terminate the stay of most of those who leave the chalets.

These Chalets are visited by a medical officer of the Tuberculosis Branch twice weekly, and between these visits, management of general medical conditions is undertaken by the physicians in attendance at Mount Royal : Dr. McCutcheon and Dr. Melville.

Management of the tuberculous conditions has been directed towards containment of the existing lesions, and antibiotic therapy is used for this and excerbations or extensions of the disease. Prophylactic management of provoking illness is exercised.

Investigations of tuberculous or non-tuberculous conditions beyond the scope of the Chalet facilities are carried out at the Austin Hospital, the Royal Melbourne Hospital, and the Melbourne Dental Hospital. A service by a Melbourne firm of opticians attends to the visual needs of the patients.

The patients enjoy the amenities available to the inmates of the Mount Royal House for the Aged and Infirm, of which the Chalets are a smaller part.

Occupational therapy, principally of a diversional type, is under the supervision of Miss Best, Occupational Therapist of the Tuberculosis Branch of the Department of Health.

Colonel R. Elliot, the Medical Superintendent at Mount Royal, and his staff display a great sympathy for the problems of the aged and infirm, and this attitude contributes greatly to the pleasant atmosphere enjoyed by the patients in these Chalets.

At Eleanor Shaw Chalet there are twelve female beds and at Dunstan Chalet nineteen beds for males.

Statistics.

——	Admissions.	Discharges.	Deaths.
Eleanor Shaw Chalet ..	8	5	1
Dunstan Chalet ..	12	9	5

Tuberculosis Chalet, Ballarat.

Visiting Physician : Dr. G. T. James.

The total number of patients admitted during 1951 was 24. The number discharged was nineteen. Deaths numbered three.

The number of patients under treatment by artificial pneumothorax was ten ; this included some actually attending as out-patients, whose refills were carried out at the Chalet for convenience sake. Actually 191 refills were given for the year.

The average duration of stay of patients was 131·6 days. There is the usual difficulty in arranging accommodation, often because many patients are really unsuitable cases for Chalet treatment, either medical or surgical, e.g., the chronic bilateral fibroid type in elderly people. These admissions frequently delay the admission of more acute and urgent cases for whom so much can be done in the early stages.

The establishment, late in the year, of the Thoracic Surgical Unit was a most noteworthy event. This effort at decentralizing some of the work will more than justify itself. Since the demand for accommodation for surgical cases is so great, the establishment of this unit in Ballarat will give patients living in this area of the State a far greater opportunity for surgical treatment at the optimum time.

King Edward VII. Memorial Chalet, Bendigo.

Visiting Physician : Dr. W. Rosenthal.

During the year ending 31st December, 1951, the 24 beds of the Bendigo Chalet were fully occupied except for short periods when inmates were temporarily away at the Austin Hospital undergoing investigation or surgical treatment.

Admissions during the period were 14 male and 14 female, a total of 28. Discharges, 10 male and 12 female, a total of 22 ; 2 male and 1 female deaths occurred. The average duration of stay was 319 days.

Dr. Leslie Williams visited periodically during the year for the purpose of consultation and where possible reviewed cases prior to application being made for surgical treatment. Cases submitted to surgery at the Austin Hospital were returned to the Chalet for convalescence and after-treatment.

Regular picture nights are held each month in the Chalet by means of a mobile projector, visits by concert parties are arranged, and a Red Cross library service is available, but occupational therapy is limited by the absence of a visiting instructor.

Hamilton Chalet.

Visiting Physician : Dr. C. Sawrey.

During the year there were nineteen admissions and eighteen discharges.

The periodical visits of Dr. Leslie Williams to the Chalet are very much appreciated. Her advice on the treatment of difficult cases has been most helpful.

Statistics.

Admissions	19
Discharges	18
Deaths	1
Total number of Artificial Pneumothoraces conducted	39
Total number of Pneumoperitoneums	3
Average stay in Chalet	$27\frac{3}{4}$ weeks.

Horsham Chalet.

Visiting Physician : Dr. T. Walpole.

During the period 1st January to 31st December, 1951, a total of 15 patients was admitted. There were 17 discharges and the average duration of stay per patient was 155 days. One (1) artificial pneumothorax was induced. There were two deaths.

Mildura Chalet.

Visiting Physician : Dr. J. S. Bothroyd.

Relevant statistics for the period 1st January, 1951, to 31st December, 1951, are as follows :—

Statistics.

	Male.	*Female.*
Admissions	13	4
Discharges	6	7
Deaths	4	1

Total Number of Pneumothoracies Conducted.

Artificial Pneumothoracies	3
Artificial Pneumothoracic Refills	56

Average Duration of Stay.

Male	119·4 days
Female	209·9 days.

Sale Chalet.

Visiting Physician : Dr. G. J. B. Baldwin.

During the year 1st January, 1951, to 31st December, 1951, there were 33 admissions, made up of 20 males and 13 females. The discharges totalled 28, 15 males and 13 females, and the deaths totalled 5, 4 males and 1 female. The average duration of stay of the patients was 179 days.

The following therapies were carried out :—

Artificial Pneumothorax.—Inductions, 6 ; Refills, 166.

Pneumoperitoneum.—Inductions, 3 ; Refills, 64 ; Phrenic crush, 2.

During the year difficulties were again encountered with regard to trained staff, but throughout most of the year a reasonably full staff was maintained, and the work was carried out fairly satisfactorily. Towards the end of the year four tuberculosis trained sisters arrived from England to staff the Chalet.

The periodic visits of the consultant Dr. Leslie Williams were of great practical value to the visiting physician, and the ready co-operation of the Central Chest Clinic and the Austin Hospital was of great value.

No major problems arose throughout the year

Warrnambool and District Base Hospital

Visiting Physician : Dr. H. J. Barbour.

Relevant statistics for the period 1st January, 1951, to 31st December, 1951, are as under :—

Total number of admissions ..	22
Discharges	24
Deaths	2
Total number of Artificial Pneumothoraces and Pneumoperitonei ..	7
Average duration of stay of patients (approx).	233 days.

Mooroopna Chalet.

Visiting Physician : Dr. J. B. McMiken.

The total number of admissions for the year were 32. Twenty-three people have been discharged and there have been eight deaths. The total number of artificial pneumothoraces was five. Average duration of stay was 221·2 days.

The nursing of tuberculosis patients has proceeded smoothly throughout the year. We have never had cause to delay any admission because of lack of beds, and we have been able to help Wangaratta on a few occasions by admitting a patient to Mooroopna Chalet for a short period while awaiting a bed at Wangaratta.

Two cases have been referred for major surgery.

Wangaratta Chalet.

Visiting Physician : Dr. J. B. McMiken.

During most of the year the beds were fairly fully occupied and it was not necessary to keep any patient waiting more than a few days for admission.

The total admissions for the year were sixteen. There were eleven discharges and three deaths. The average length of stay was approximately 21 weeks.

During the year seven persons were under treatment for artificial pneumothorax. A total of 125 refills were given.

The Chalet, Geelong.

Visiting Physician : Dr. D. F. L. Seward.

During 1951 a total of 27 patients was admitted to the Chalet. There were 22 discharges and no deaths. The average duration of stay of patients was seven months. The total number of patients has still been limited by inadequacy of nursing staff, but has at the same time steadily increased from that of the previous year to a total of 25.

Six patients were treated with an artificial pneumothorax, and two were treated with a pneumoperitoneum. A total of 90 refills was given.

A tribute is paid to the work of the Red Cross Society in giving instruction and supervision in handcraft, such as leather work. This occupational therapy is a very valuable asset to the patients. The highlight of recreational facilities is the weekly picture night, with a full length picture being shown once a month.

The work of installing headphones to each bed has been commenced for use with a three-channel radio system. This will be a great improvement from the individual wireless sets now in use.

Rehabilitation Section.

Medical Officer : Dr. J. O'Rorke.

In last year's report it was indicated that prevocational problems were receiving increased attention. Relevant statistics of the two years have shown that much progress to that end has been made. Close liaison between this section and the Apprenticeship Commission has enabled many patients to utilize their time towards the completion of their apprenticeship. The advice of the Commission's Officers has been made freely available to us and has been a great help. We are endeavouring to arrange work-study lectures by the Commission dealing with medically approved trades for ex-patients. Acknowledgement is also made to the University of Melbourne, Melbourne Technical College, and the Correspondence School, Fitzroy, for the specialized advice they have given to sanatorium patients. The Vocational Guidance Team is now an accepted feature of sanatorium régime and here again increased figures are reported.

Post Sanatorium Régime.

Smooth placement in work and training has again been achieved by close liaison between the State and Commonwealth Departments of Labour and National Service (including the Commonwealth Employment Service) and Social Services. It is noted that changing economic circumstances may interrupt job placement in the future. In those circumstances some form of sheltered employment may have to be considered. Liaison between the Victorian Tuberculosis Association and this section has also been closely maintained through the Almoner. It is desired to acknowledge the help this Association has given towards successful rehabilitation of patients.

Statistics.

Number of patients seen	405
(This figure does not include further interviews with patient.)	
Number of patients sent for training ..	157
(This figure does not include those already training.)	
Number of patients sent for employment ..	150
Number of patients visited in sanatoria or hospitals	236
Number of patients investigated at request of Commonwealth or Apprenticeship Commission	127
Number of patients investigated at request of Red Cross or other hospitals	47
Number of children placed in homes or for adoption	47
Number of correspondence courses arranged	78
Number of patients being taught shorthand or typing in hospital or at home	57
Number of patients being given home occupational therapy	14
Number of patients found accommodation or referred to Housing Commission ..	54
Number of patients given financial aid ..	33
Number of patients given help with clothing and bedding	19
Number of patients given advice only ..	21
Number of home visits	136
Number of patients referred to outside agencies for help	143
Number of patients followed-up after placement in employment or training	225
Number of patients sent for vocational guidance tests	44
(This figure does not include those visited by vocational Guidance Team in Gresswell.)	
Number of queries made on behalf of patients to the Social Services Department	85
Number of patients in training (Social Services figures)	120

DIVISION OF CHEST X-RAY SURVEYS.

During the year 1951 the Cancer Institute took over the whole of the old Queen Victoria Hospital and the X-ray Survey Division was moved to premises at Milton House in Flinders-lane.

This move entailed some temporary disorganization but, nevertheless, the work of the Division was well maintained. This can be attributed in no small measure to the excellent co-operation and the willingness of the staff, both technical and administrative, to combat difficult situations. Internal administration was made particularly difficult because of the inadequate facilities initially available at Milton House. Temporary alterations performed by the technical staff of the Division, however, has allowed us to carry on with two X-ray machines, but the lack of adequate space for the testing of the Mobile Units put much strain on Survey activities.

During the year 278,000 miniature films were taken, compared with 291,000 in the previous year. This is very gratifying, but one must remember that we are now beginning to make return visits to various centres and the number of people coming to these second Surveys shows a slight diminution, the feeling among many being that one X-ray is all that is necessary in one's lifetime. This presents and will continue to present a very real problem. Up to the present we have been carried along, to a great extent, by the novelty of X-rays. One asks " Will propaganda be sufficient to overcome apathy when the novelty value of a Survey is lost ? "

The most successful Survey conducted during the year occurred when the City of Melbourne was covered and in this Survey, conducted for a period of two weeks, approximately 40,000 attended for miniature films. Easy accessibility and the central position of the Melbourne Town Hall were big factors in promoting such a good result.

The number of active and possibly-active cases of tuberculosis found during the year amounted to 767 and of healed or quiescent cases to 4,118, representing 0·277 per cent. and 1·69 per cent. respectively. The percentage of active and possibly-active cases thus showing a drop from 0·5 per cent. which was the figure obtaining in the first years of Mass X-ray Survey work in Victoria.

The fall in the number of these cases must be noted with a certain amount of reserve. The question as to whether this is due to a real fall or whether we are drawing from the same pool as in former years and not reaching that 25 to 30 per cent. of the population which is still elusive has yet to be answered. Halliday Sutherland points out that the general survey figure in England is 0·4 per cent. but that in an experiment in one county where the general practitioners were asked to send all their patients for X-ray, the figure rose to 2·8 per cent. or seven fold. It may well be that there is an extremely large pool of infection in Victoria that is as yet untouched and which remains the major source of infectivity.

In addition to normal survey, and follow-up work, liaison has been established with the Women's Hospital, whereby all new patients attending hospital report to the Division for a miniature film. Some re-duplication of work is necessarily brought about by this system for, owing to the fact that all statistical data of the Division is performed manually, a basic file is not at the moment possible, but as a tabulating machine system will be introduced in the near future, it is felt that many difficulties that are now encountered on the statistical side will be solved.

Another group which has enlisted the services of the Division is the Recruiting Depot for the Navy, the Army, and the Air Force.

For this purpose a unit is situated at Degraves-street Depot and by courtesy of the combined forces it is possible to use this plant for civilian work on a Saturday morning, thus allowing many people for whom it is impossible during the week the opportunity of having their follow-up films taken at this depot.

During the year three more mobile machines of standard pattern were delivered from the manufacturers ; this has improved efficiency by permitting more maintenance to be carried out on the older plants which are now showing much wear and calling for longer periods of overhaul.

The need also for greater mobility on Survey work is becoming increasingly evident, particularly during visits to smaller towns, where much time is lost erecting and dismantling plants for a one-day survey. Much thought has been put into this matter and it is felt that more use could be made of mobile vans of the larger type and containing X-ray machines already erected. This would not only overcome the time factor but also lessen the hazards of damage to equipment by the amount of manhandling which is at present necessary.

Whilst on the subject of plant and equipment, mention should be made of an area in Victoria containing some 300,000 people which, because of power difficulties we are unable to penetrate at the moment with our type of X-ray machine. It is interesting in this regard to mention that in some of these areas where we are unable to conduct a survey the incidence of tuberculosis, as signified by notification, is much higher than in places where surveys are able to be conducted, e.g., Dimboola. However, the introduction of Mirror Cameras, using less power, may be a possible answer.

Finally mention should be made of the 4,698 abnormalities of a non-tuberculous nature found during the year. By careful reporting to local doctors and, in some cases, by direct reference to the General Hospital, many were able to undergo treatment at the right time, viz., before symptoms had become evident. When it is noted that 71 cases of tumor formation were amongst these abnormalities, one realizes how very important this side of our work has become.

Miniature Films.

Metropolitan Area	130,158
Industrial Organizations	14,590
Commonwealth Government Establishments	8,979
State Government Establishments ..	2,834
Fixed Centres	40,992
Central Recruiting Office	5,300
Country	75,085
Total films taken	277,938

T.B. Abnormalities.

—	Total.	Proved and Possibly Active.	Percentage.	Healed or Quiescent.	Percentage.
Metropolitan Area	202,853	611	0·301	3,306	1·62
Country ..	75,085	156	0·208	812	1·08
Total ..	277,938	767	0·276	4,118	1·49

Non-T.B. Abnormalities.

—	Cardiac.	Pleural.	Silicotic.	Tumour.	Hydatid.	Thyroid.	Others.
Metropolitan Area	615	687	35	36	14	50	707
Industrial Organizations	44	105	4	..	..	1	69
Commonwealth Government Establishments	24	62	..	..	..	1	62
State Government Establishments	10	29	2	1	1	1	29
Fixed Centres	147	276	8	14	1	5	340
Central Reeruiting Offiee	33	61	5	1	..	..	121
Country	339	369	9	19	15	26	320
Totals	1,212	1,589	63	71	31	84	1,648

Total Non-T.B. Abnormalities, 4,698.

MANTOUX TESTING—B.C.G. VACCINATION SECTION.

In the early part of 1951 the Mantoux testing surveys were carried out as in 1950. Children from one year to eighteen years were Mantoux tested, at schools and pre-school centres, and the positive reactors were X-rayed by the Division of Mass X-ray Surveys.

During February, 1951, B.C.G. vaccination was added to the activities of this Section and in June, 1951, a campaign was commenced to immunize with B.C.G. vaccine all children of school leaving age (fourteen years and over) in Victoria within the next two to three years. At Preston, parents of children of school leaving age were given the opportunity of having them vaccinated with B.C.G. and over 90 per cent. of parents gave their consent.

Work in other municipalities was carried out on the same lines and the results were as follows :—

Municipality.	Number Mantoux Tested (all ages).	Number Given B.C.G. Vaccine (14 years and over).
Preston	3,305	279
Fern Tree Gully ..	3,186	123
St. Kilda	3,530	233
Prahran	4,075	1,066
Mildura	4,245	294
Werribee	398	..
	18,739	1,995

A preliminary Mantoux test was carried out on every child and B.C.G. vaccine given to the negative reactors.

Schools in five metropolitan municipalities were visited in addition to those mentioned above. A large part of Northern and North-Eastern Victoria was covered, the latter area with the assistanee of Dr. E. J. Crowe, District Health Officer.

The results are set out in Table 1. It can be seen from these results that less than 10 per cent. of parents refused B.C.G. for their children.

No reports have been received of glandular enlargement following B.C.G. vaccination in 1951.

Reports were received of three children having an ulcer following B.C.G. vaccination which took longer than eight weeks to heal completely. These reports were from the metropolitan area.

B.C.G. Vaccination of Groups Other than School Children.

1. In May, 1951, the patients at Mont Park Mental Hospital were Mantoux tested and the negative reactors were vaccinated with B.C.G. vaccine. This work was done in conjunction with Dr. North of the Commonwealth Serum Laboratories. The results are as follows :—

Total Number of Patients Tested.	Number Positive.	Percentage Positive.	Number Given B.C.G. Vaccine.
1,473	975	66·2	468

2. Early in 1951 this section was made responsible for immunization of nurses in their preliminary training period at the Melbourne School of Nursing. The results were as follows :—

Number Mantoux Tested.	Number Positive.	Percentage Positive.	Number Given Immunization with P.T.A.P.
198	35	17·68	163

3. While conducting a school compaign in the Shepparton District in September, 1951, a visit was made to the Dookie Agricultural College where Mantoux tests and B.C.G. vaccination were carried out.

Number Tested.	Number Positive.	Percentage Positive.	Number Given B.C.G. Vaccine.
114	31	27·2	83

Summary of Mantoux Testing and B.C.G. Vaccination Results in 1951.

Campaign.	Total Mantoux Tested.	Total Given B.C.G. Vaccine.
Combined Mantoux testing (all ages) and B.C.G. (14 years and over) Campaigns	18,739	1,995
B.C.G. of 13 years and over ..	9,004	7,619
Dookie Agricultural College ..	114	83
Mont Park Mental Hospital patients	1,473	468
School of Nursing	198	163

TUBERCULOSIS BRANCH.

Director of Tuberculosis ..	E. V. Keogh, M.B., B.S., F.R.A.C.P.
Deputy Director of Tuberculosis ; Diagnostic Services	H. M. James, M.B. *et* Ch.B.
Deputy Director of Tuberculosis ; Sanatoria and Chalets	Dr. D. B. Rosenthal, M.D., B.S., M.R.C.P.
Supervisor of Mass X-ray Surveys	Dr. A. H. McNaughton, M.B., B.S.
Tuberculosis Officer (Country)	K. G. Kerr, M.B., B.S., D.P.H.
Rehabilitation Medical Officer	J. O'Rorke, L.R.C.P., L.R.C.S.
Secretary	J. L. Eabry, B.Com., A.F.I.A.

Consultant Panel, Departmental Tuberculosis Committee.

Professor P. MacCallum, M.A., M.Sc., M.B., Ch.B., D.P.H., R.C.P.S., M.R.C.P., F.R.S.E., F.R.A.C.P.
Professor F. McF. Burnet, M.B., B.S., F.R.S., D.Sc.
Professor S. Rubbo, M.B., B.S., Ph.D., Dip.Bact., B.Sc., M.P.S.
Sir W. S. Newton, M.D., F.R.A.C.P.
C. H. Fitts, M.D., D.T.M., M.R.C.P., F.R.A.C.P.
W. W. S. Johnston, M.D., F.R.A.C.P.
A. Penington, M.D., B.S.
J. I. Hayward, M.D., M.S., F.R.C.S.
C. J. Officer Brown, M.D., F.R.C.S., F.R.A.C.S.
J. O'Sullivan, M.B., B.S., D.M.R.E., F.R.A.C.P., F.F.R.
K. Hallam, B.A., M.B., B.S., D.M.R.E.
C. F. MacDonald, M.B., B.S., D.M.R.E., F.R.A.C.P., F.F.R.
J. B. D. Galbraith, M.D., F.R.A.C.P.
C. E. Eddy, D.Sc., F. Inst. of P.
W. Newing, M.D., F.R.A.C.P.

Institutions.

Sanatoria.	*Medical Superintendent.*
Gresswell	D. B. Rosenthal, M.D., B.S., M.R.C.P.
Greenvale	Margaret Playle, M.B , B.S.
Heatherton ..	B. Clerehan, M.B., B.S.

Hospitals.	*Medical Officer in Charge.*
Austin	P. Bull, M.D., B.S.
Fairfield Chest Unit	Dr. M. Renth.
Mount Royal : Eleanor Shaw and Dunstan Chalets	S. Wigley, M.B., B.S., M.R.C.P.

Country Chalets.	*Visiting Physician.*
Ballarat	G. T. James, M.D., B.S.
Bendigo	W. Rosenthal, M.B., B.S.
Hamilton	C. E. Sawrey, M.B., B.S., M.R.A.C.P.
Horsham	T. V. Walpole, M.B., B.S.
Mildura	J. S. Bothroyd, M.D., M.S.,
Sale	G. J. B. Baldwin, M.B., B.S., M.R.A.C.P.
Wangaratta ..	J. B. McMiken, M.B., Ch.B., M.D., D.D.R.
Mooroopna ..	
Warrnambool ..	H. J. Barbour, M.B., B.S.
Geelong	D. F. L. Seward, M.B., B.S.

VITAL STATISTICS.

Victoria—1951.

Year.	Deaths.						
	Pulmonary Tuberculosis.			Non-Pulmonary Tuberculosis.			All Forms.
	Male.	Female.	Total.	Male.	Female.	Total.	
1929	529	348	877	80	83	163	1,040
1930	482	406	888	99	74	173	1,061
1931	472	393	865	51	69	120	985
1932	465	348	813	72	66	138	951
1933	401	336	737	70	51	121	858
1934	419	334	753	76	60	136	889
1935	430	331	761	62	55	117	878
1936	394	368	762	63	45	108	870
1937	410	303	713	42	52	94	807
1938	371	306	677	41	46	87	764
1939	433	323	756	51	39	90	846
1940	436	291	727	35	49	84	811
1941	469	300	769	50	57	107	876
1942	460	331	791	46	42	88	879
1943	410	230	640	47	57	104	744
1944	422	257	679	41	33	74	753
1945	382	267	649	41	40	81	730
1946	404	246	650	32	29	61	711
1947	391	221	612	31	34	65	677
1948	367	214	581	36	24	60	641
1949	381	160	541	20	26	46	587
1950	282	110	392	18	22	40	432
1951	259	100	359	25	23	48	407

Annual Death Rate per 1,000,000.

Year.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Tuberculosis (All Forms).	Year.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Tuberculosis (All Forms).
1929	496	92	588	1941	397	55	452
1930	498	97	595	1942	402	45	447
1931	481	68	549	1943	323	52	375
1932	450	76	526	1944	430	37	377
1933	405	66	471	1945	323	40	363
1934	411	74	485	1946	330	34	364
1935	414	64	478	1947	306	32	338
1936	412	59	471	1948	278	29	307
1937	384	51	435	1949	250	21	271
1938	363	47	409	1950	178	18	196
1939	402	48	450	1951	158	21	179
1940	383	44	427				

Bed Position—31st December, 1951.

——	Male.	Female.	Total.
Gresswell Sanatorium, Mont Park	192	..	192
Heatherton Sanatorium, Cheltenham	..	268	268
Greenvale Sanatorium, Broadmeadows	..	236	236
Fairfield Chest Unit, Fairfield	25	25	50
Austin Hospital, Heidelberg	84	44	128
Austin Hospital, Heidelberg (Children's Ward)	6	6	12
Dunstan Chalet, Royal Park	19	..	19
Eleanor Shaw Chalet, Royal Park	..	12	12
Bendigo Chalet, Bendigo	14	10	24
Ballarat Chalet, Ballarat	10	10	20
Mildura Chalet, Mildura	7	7	14
Hamilton Chalet, Hamilton	7	7	14
Horsham Chalet, Horsham	7	7	14
Wangaratta Chalet, Wangaratta	7	7	14
Sale (*ex* R.A.A.F. Hospital)	20	20	40
Warrnambool Chalet, Warrnambool	7	11	18
Mooroopna Chalet, Mooroopna	15	14	29
Geelong Chalet, Geelong	15	15	30
	435	699	1,134

Vital Statistics—*continued.*

Bureaux Attendances—Metropolitan and Country.

Bureau.	New Cases Applying.	Total Attendances—Old and New Cases.	X-ray Examinations.		A.P. Refills Attendances.
			Films.	Screens.	
Central	4,874	31,792	17,063	3,158	2,399
Ballarat	222	1,471	875	..	168
Geelong	297	1,842	996	317	229
Prahran	2,879	5,003	4,489	..	8
Bendigo	757	3,215	1,673	100	122
	9,029	43,323	25,096	3,575	2,926

Bureau Services—Visiting Nurses.

Bureau.	First Visits.	Revisits.
Central	739	9,031
Ballarat	18	721
Bendigo	29	448
Geelong	23	393
Prahran	53	153
Total	862	10,746

Sanatoria Activities.

Institutions.	Admissions.		Discharges.		Deaths.	
	Male.	Female.	Male.	Female.	Male.	Female.
Metropolitan.						
Austin	141	161	131	149	11	5
Greenvale	..	145	..	96	..	6
Gresswell	195	..	186	..	14	..
Heatherton	..	245	..	222	..	12
Mint-place Annexe .. .. / Fairfield Chest Unit	..	150	..	167	..	4
Dunstan Chalet	12	..	9	..	5	..
Eleanor Shaw Chalet	..	8	..	5	..	1
Total	348	709	326	639	30	28
Country.						
Ballarat	10	14	10	9	1	2
Bendigo	14	14	10	12	2	1
Horsham	8	7	11	6	2	..
Hamilton	7	12	10	8	1	..
Mildura	13	4	6	7	4	1
Sale	20	13	15	13	4	1
Wangaratta	9	7	5	6	3	..
Mooroopna	19	13	13	10	2	6
Warrnambool	10	12	4	20	2	..
Geelong	10	17	5	17	..	..
Total	120	113	89	108	21	11
Total in Metropolitan and Country Institutions	468	822	415	747	51	39

MANTOUX TESTING AND B.C.G. VACCINATION RESULTS—CITY AND COUNTRY SURVEYS, 1951.

Municipality.	Number Mantoux Tested.	Number Positive.	Percentage Positive.	Number Given B.C.G. Vaccine.	Number of Cards Returned.	Number of Refusals.	Percentage Refusals.	Number of Doubtful Positives (not given B.C.G. Vaccine).
Metropolitan—								
Melbourne City	3,944	819	20·7	3,125	4,196	229	5·4	Nil
Northcote	242	38	15·7	204	277	35	12·6	..
Sandringham	666	93	14·0	573	748	82	10·9	..
Moorabbin	57	11	19·3	47	*	*	*	..
Heidelberg and Eltham ..	229	34	14·8	195	269	26	9·7	..
Totals	5,138	995	19·37	4,144	5,490	372	6·78	..
Country Areas—								
Echuca	364	29	8·0	335	398	13	3·3	..
Shepparton	587	46	7·8	541	680	23	3·4	..
Tongala	32	2	6·2	30	35	Nil	Nil	..
Tatura, Kyabram, and Mooroopna	155	5	3·2	150	180	14	7·8	..
Numurkah and Nathalia ..	188	11	6·0	177	212	4	1·9	..
Rochester	72	3	4·2	69	94	9	9·6	..
Seymour	186	21	11·3	165	211	15	7·1	..
Kilmore	196	29	14·8	167	203	7	3·4	..
Yarrawonga	102	7	6·9	95	113	4	3·5	..
Cohuna	98	8	8·2	90	106	2	1·9	..
Yea	30	4	13·3	26	41	1	2·4	..
Healesville and Warburton ..	130	20	15·4	110	142	2	1·4	..
Wangaratta	575	63	11·0	490	626	33	5·3	22
Beechworth	94	9	9·6	81	107	11	10·3	4
Myrtleford and Bright ..	48	2	4·2	45	53	3	5·7	1
Alexandra	95	4	4·2	81	102	3	2·9	10
Mansfield	61	5	8·3	55	68	5	7·4	1
Benalla	221	20	9·1	196	297	42	14·1	5
Euroa	99	7	7·1	91	124	7	5·6	1
Wodonga	75	11	14·7	61	84	1	1·2	3
Rutherglen	67	5	7·5	59	84	7	8·3	3
Kerang	195	12	6·2	183	*	*	*	..
Swan Hill	196	18	9·2	178	*	*	*	..
Totals	3,866	341	8·8	3,475	3,960	206	5·2	50

* Not known.

[Photograph by courtesy *Woman's Day*.]

Group of mothers in the new centre at Sale, erected in memory of Sister Muriel Peck who, with the late Dr. Scantlebury Brown, pioneered Infant Welfare Services in Victoria.

REPORT OF THE DIRECTOR OF MATERNAL, INFANT, AND PRE-SCHOOL WELFARE, 1951–52.

INTRODUCTION.

Since the infant welfare movement began in 1917 there has been a changing emphasis in regard to the importance of the various causes of infantile deaths. At the inauguration of the movement the main cause listed under preventable diseases was infantile diarrhoea, which accounted for 16 per cent. of infantile deaths. Now as centres have been established throughout the State, mothercraft teaching is available to all mothers, and the results are seen in the reduced death rate attributed to this cause.

As the result of immunization against diphtheria, there has been a considerable reduction in the deaths due to this disease, and with more active measures for immunization against whooping cough even more satisfactory results in regard to infectious diseases may be obtained.

In the neo natal group the largest proportion of infant deaths is due to prematurity, though the provision of a high standard of care in the large midwifery hospitals and in our infant welfare training schools has possibly contributed to some slight decrease in deaths due to this cause. Much should be gained by the registration of stillbirths, legislation for which has just been passed. The same causes operate for stillbirths and neo-natal deaths, and the accurate recording of our stillbirths is the first step to closer investigation of these causes. Still more is expected from the stringent pre-natal care which is now being instituted by the Women's Hospital along the lines which have been so successful in New South Wales at the Crown-street Hospital.

Rigorous efforts are being made to watch for any excess gain in weight in the expectant mother, paying special attention to any gain over 8 lb. between the 20th and 30th week. Any undue increase in weight means placing the mother on a high protein diet. A careful check is kept on the blood pressure and a significant rise is dealt with immediately. These measures have been most successful in eliminating toxaemia of pregnancy, and with the elimination of toxaemia there should be a corresponding reduction in the number of premature and stillbirths.

The Professor of Child Health in Sydney has called attention to the importance of the early months of pregnancy and the abnormalities which may result from noxious influences at this time. While recognition of the danger of rubella at this period is widespread, the many other factors, e.g., other infections, trauma, drugs, excessive vomiting, uterine haemorrhage, radiation, and hydramnios, which may result in deformities, are not so frequently recognized. With the decrease in infantile deaths from other causes, congenital abnormalities now account for a large percentage of infantile deaths. Further investigation into factors operating during this period is all important.

Accidents as a cause of death in childhood are also receiving well merited attention. Deaths due to this cause have increased from 0·32 in 1950 to 0·61 in 1951, a total increase of from 16 to 31. The Children's Hospital has repeatedly emphasized the number of preventable accidents occurring in children. Now, Dr. F. W. Clements, of the Institute of Child Health, is undertaking a survey in regard to accidents to pre-school children. To further his survey a questionnaire has been distributed to mothers of all children in subsidized pre-school centres in this State.

The importance of providing for the emotional and social needs of children as well as for their physical well being is now universally recognized. The problems arising from failure to meet these needs adequately now dominate the child welfare field.

To meet the challenge the importance of adapting our training courses, both infant welfare and mothercraft, is stressed. A move in this regard took place two years ago when the question was first raised by the infant welfare section of the Royal Victorian College of Nursing. A Committee was set up by the Nurses' Board at their request, and a deputation waited on the Minister and stressed the desirability of increasing the length of infant welfare training to six months, thus providing more training in regard to the needs of the pre-school child and more experience in field work.

Funds for the scheme as outlined were not available and the matter was held over. In May this year, the infant welfare section of the College held an all-day conference asking medical officers of the Department to act as a "Brains Trust" and reply to all questions sent in by sisters. It was apparent from the many and varied questions asked that more help should be made available to sisters in centres. The sisters themselves realize that the scope of their work has extended, involving much more advice on the management of the pre-school child. All concerned with positive health, particularly those in the mental hygiene field, are aware of the importance of giving help in this period. Mothers now look for guidance in emotional and social problems and all important, too, is the right presentation of the health teaching given to them. As instruction in this is not provided in nurse basic training or midwifery, and has not been included in the infant welfare training to date, it is obvious that the training should be revised and extended. There is a general feeling that more practical experience in infant welfare centres and some experience in pre-school centres is desirable.

While every effort is made at the monthly conferences to keep the sisters abreast of current thought in child welfare, these conferences alone cannot maintain the service at a high level of efficiency. The need for short refresher courses of two to three weeks duration for sisters after ten years' service in a centre is again emphasized. Since the opening of the Queen Elizabeth Maternal and Child Welfare Centre more sisters have taken refresher courses and the service provided by the centre and the value to the sisters is gratefully acknowledged.

The Nurses' Board has again set up a committee to consider revision of the course, and this committee has had a number of meetings and should submit a report shortly to the Board. Simultaneously with State recognition of the need for revision of training, attention was directed to the subject by Dr. F. W. Clements, of the Institute of Child Health, who convened a meeting of the Committee on Maternal and Child Welfare of the National Health and Medical Research Council. This I attended in Sydney last May. The desirability of providing a six months' course for infant welfare sisters was discussed. Such a course should incorporate teaching in regard to the problems of the toddler period and guidance in the health education of mothers. It was felt that such training should be made reciprocal between all States.

Our mothercraft course has always given some teaching on the needs of the pre-school child, but this should be amplified as many mothercraft nurses care for older children either in homes or institutions.

Throughout the year all three sections of the Branch have shown further extension with increasing demands on the staff. A recommendation has been made that the subsidies to the municipalities should be increased for the appointment of their own officers in this field. Such a policy would relieve the Departmental staff of increasing burdens and should stimulate local interest and effort. During the year, Brighton appointed a pre-school child development officer and Prahran a medical officer for maternal and child welfare.

Buildings for both infant welfare and pre-school purposes have been held up owing to the deferring of capital grants. This unavoidable check on building has caused much disappointment to many groups who have battled to raise funds for such purposes. With present high costs, the erection of buildings without Government assistance is virtually impossible. During the year, however, a number of buildings for which capital grants were received prior to the deferment have been opened.

TABLE 1.

Building Grants have been approved for 43 metropolitan and 19 country centres during the year, details of which are given below :—

——	1948.	1949.	1950.	1951.	Total.
Metropolitan.					
Infant Welfare Centres ..	10	11	1	9	31
Combined Infant Welfare and Pre-school Centres	3	2	..	1	6
Pre-school Centres ..	11	25	14	32	82
Creches	1	2	2	1	6
Total ..	25	40	17	43	125
Country.					
Infant Welfare Centres ..	14	26	9	13	62
Combined Infant Welfare and Pre-school Centres	2	..	1	..	3
Pre-school Centres ..	8	10	4	6	28
Creches	..	1	..	..	1
Total ..	24	37	14	19	94

The total number of buildings for which capital grants have been approved since 1st July, 1948, is 219.

ANTE-NATAL.

TABLE 2.—ATTENDANCES OF EXPECTANT MOTHERS FOR YEAR ENDED 31ST DECEMBER, 1951.

(*a*) *Metropolitan-Municipal Pre-Natal Medical Supervision Centres.*

Name of Centre.	Number of Patients.	Number of Visits to Centre.
Coburg	469	2,356
Collingwood	200	647
Fairfield	178	832
Fitzroy	254	1,189
Hawthorn	431	1,845
Moonee Ponds	13	13
Northcote	328	1,439
Port Melbourne	129	727
Prahran	499	2,102
Preston	529	1,538
Richmond	338	1,335
Sandringham	247	1,055
South Melbourne	297	1,279
Sunshine	261	1,389
Yallourn	455	2,799
	4,628	20,545

(*b*) *Attendances of Expectant Mothers for Pre-Natal Hygiene at Victorian Infant Welfare Centres.*

——	1950.	1951.
Number of individual cases ..	6,166	6,017
Number of new cases	4,750	4,469
Total number of consultations ..	14,928	13,073

A new centre was established by the Essendon Council at Moonee Ponds, and attendances here have increased rapidly, indicating the great need for such a centre in this district.

Attention is directed to the increased attendances at all centres and the additional work necessitated by dietary control, the importance of which has been so convincingly demonstrated by recent research into the relationship between undue increase in weight and the incidence of toxaemia.

At all centres the expectant mothers are weighed regularly and the dietitian gives advice to any individual mother whose increase in weight is causing concern. The essentials of good diet, the wise purchase and preparation of foods to retain full nutritive value and the necessary adjustment of diet to control undue gain in weight are taught. The Department is fortunate in having the services of a triple certificated sister, who is also a dietitian, for this purpose and her services in this field have been invaluable. This careful weight check necessitates more frequent attendance of the mother, particularly between the 20th and 30th week.

Instruction in simple anatomy and physiology is given and the importance of breast feeding stressed by medical and nursing officers.

Some mothers attend the clinics for post-natal advice for themselves or their babies. This service is strictly limited as sufficient time is not available. All are referred on to infant welfare centres.

Officers of the Department continue to maintain close co-operation with the staffs of the Women's and Queen Victoria Hospitals. While mothers are most appreciative of the service and attendances are usually regular, any defaulters are immediately reminded by letter and the hospital at which they are enrolled is notified.

Advice to expectant mothers, on general hygiene and mothercraft, is available at all infant welfare centres and is supplementary to medical care.

The pre-natal booklet continues to be in great demand and correspondence letters are available to expectant mothers living far from a doctor or centre.

INFANT WELFARE.

For the first time for many years there has been a slight increase in our infantile death rate. This year's figure is 22·61 compared with 20·09 for 1950. With the rapid increase in population due to the influx of migrants new to Australian conditions and often unaware of the services available, every effort must be made to meet expanding requirements.

TABLE 3.—INFANT MORTALITY IN VICTORIA, 1910–1951.

Period.	Rate per 1,000 Births.		
	Greater Melbourne.	Remainder of State.	Victoria.*
1910–14	84·2	64·9	73·8
1915–19	76·2	55·4	66·1
1920–24	71·6	58·6	65·3
1925	60·2	53·7	57·0
1926	61·6	49·5	55·6
1927	62·5	49·4	56·1
1928	56·8	54·5	55·6
1929	50·5	43·9	47·2
1930	50·7	42·3	46·5
1931	48·0	41·4	44·5
1932	47·7	38·7	43·0
1933	40·9	40·0	40·4
1934	48·2	41·4	44·6
1935	43·0	39·5	41·2
1936	44·1	40·7	42·3
1937	37·1	36·3	36·7
1938	34·1	34·3	34·2
1939	32·3	38·9	35·6
1940	39·7	39·2	39·5
1941	34·6	38·1	36·2
1942	43·8	38·9	41·6
1943	34·1	38·2	35·8
1944	31·0	33·3	32·0
1945	26·87	29·61	28·03
1946	27·04	27·32	27·16
1947	26·82	25·57	26·28
1948	23·77	24·12	23·93
1949	20·27	23·83	21·89
1950	19·37	20·81	20·09
1951	20·81	24·47	22·61

* See Diagram I.

1900–1951
VICTORIA INFANT MORTALITY RATE

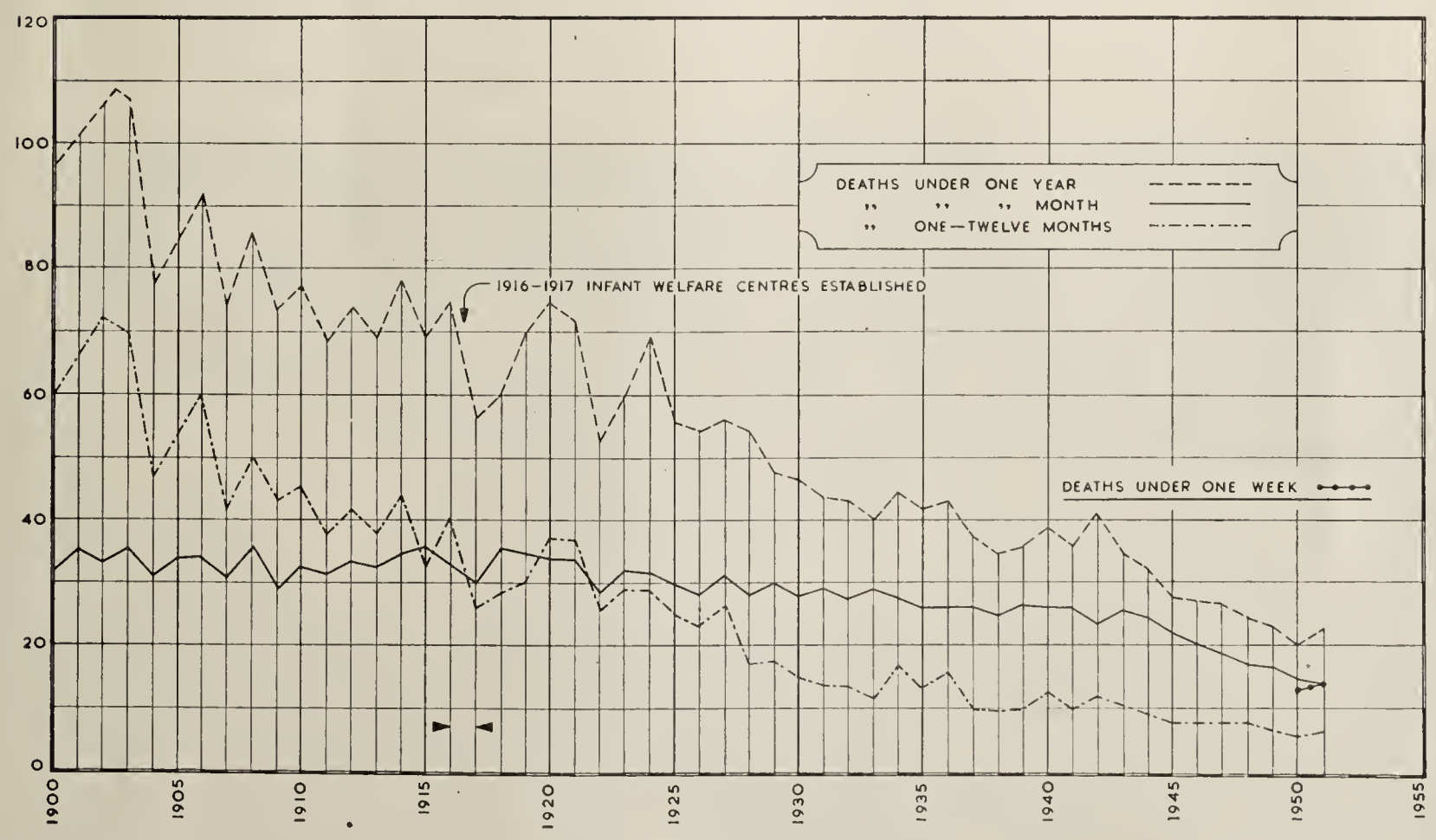


Diagram I.

10463/52.—3

TABLE 4.—INFANT MORTALITY, 1951.

Cause of Death.	Number of Deaths.			Rate per 1,000 Births.		
	Under One Month.	One Month and Under 12 Months.	Under One Year.	Under One Month.	One Month and Under 12 Months.	Under One Year.
Infective and parasitic diseases	3	39	42	0·06	0·77	0·83
Pneumonia, broncho-pneumonia, and bronchitis ..	..	77	77	..	1·52	1·52
Gastro-enteritis and colitis, except diarrhoea of the newborn	..	28	28	..	0·56	0·56
Congenital malformations	118	89	207	2·34	1·76	4·10
Certain diseases of early infancy—						
Birth injuries—						
(*a*) Without mention of immaturity	94	1	95	1·86	0·02	1·88
(*b*) With immaturity	38	..	38	0·75	..	0·75
Post-natal asphyxia and atelectasis—						
(*a*) Without mention of immaturity	68	2	70	1·34	0·04	1·38
(*b*) With immaturity	121	1	122	2·39	0·02	2·41
Infections of the newborn—						
(*a*) Without mention of immaturity	33	..	33	0·65	..	0·65
(*b*) With immaturity	18	..	18	0·36	..	0·36
Other diseases peculiar to early infancy—						
(*a*) Without mention of immaturity	54	3	57	1·07	0·06	1·13
(*b*) With immaturity	36	2	38	0·71	0·04	0·75
Immaturity unqualified	200	1	201	3·96	0·02	3·98
All other diseases	17	69	86	0·33	1·37	1·70
Accidents, poisonings, and violence	12	19	31	0·24	0·37	0·61
Total	812	331	1,143	16·06	6·55	22·61

NOTE.—Infections of the newborn include pneumonia of newborn, diarrhoea of newborn, opthalmia neonatorum, pemphigus neonatorum, umbilical sepsis, and other sepsis of the newborn.

INFANT DEATH RATES, 1951.

Under 1 week		13·94
1 week and under 1 month ..		2·12
1 month and under 12 months ..		6·55
Under 1 year . ..		22·61

TABLE 5.—DEVELOPMENT OF INFANT WELFARE SERVICES IN VICTORIA.
(Comparative Figures.)

——	1917–18.	1926–27.	1950.	1951.
Number of birth notifications received during year	..	..	47,732	49,205
Number of babies responding as a result of such notifications ..	..	..	31,941	32,484
Number of new babies on roll	..	..	50,611	52,264
Number of individual babies at centres—				
(*a*) Under twelve months	..	..	52,290*	54,324*
(*b*) Over twelve months (including those over two years) ..	..	..	57,356*	57,682*
Total individual babies and children at centres	913	25,735	102,254†	104,893†
Total number of attendances of babies and children at centres ..	4,116	192,142	1,005,996	999,336
Nurses' visits to homes	1,407	62,535	91,969	99,553
Number of babies referred to doctor	..	..	11,814	13,707
Number of babies referred to hospital	..	..	1,904	1,849
Number of mothers referred to doctor	..	..	2,083	1,953
Number of mothers referred to hospital	..	..	552	376
Telephone consultations	..	..	38,582	43,083

* Including transfers. † Excluding transfers.

Table 6.—Non-responses to Notifications of Births Invitations.

Analysis of Reasons given by Infant Welfare Centre Nurses for Non-responses to Notifications of Births Invitations.

Cause of Non-response—	%
Visiting other centres	17·8
Babies referred to correspondence scheme ..	7·0
Moved from district	8·5
Resident beyond municipality	3·2
Babies too young to attend	11·2
Address unknown	2·5
Disinterested	19·0
Deaths, including stillbirths	8·0
Other causes	22·8

At the present time insufficient finance is mitigating against the maintenance of a high standard of service. Departmental inspectors are paid at a lower rate than the sisters in centres and this makes recruitment of efficient Departmental staff difficult. As the Government is not meeting 50 per cent. of the cost of the service, municipalities are unwilling to appoint additional staff when needed. This means that the sisters cannot cope efficiently with increasing numbers. Infant welfare and mothercraft training schools are faced with rising maintenance costs and further help must be made available to them. These schools are the power-houses behind the service and are essential for its maintenance. I cannot stress too strongly the need for making additional funds available for infant welfare if our former high level of service is to be maintained.

The total number of centres in operation is now 466. Thirty-three new centres were opened during the year, twelve of these being in migrant hostels and holding camps. In July, 1951, the State Government agreed to provide an infant welfare service for these camps and the Commonwealth approved of the provision of the service for children up to the age of two. Two full-time officers of the Department have been engaged on this service and municipal sisters have given part-time service in certain areas, the municipalities concerned being reimbursed for the time expended. This work calls for much patience and wise judgment from the sisters concerned, for many of our New Australian mothers are fearful of new procedures and often reluctant to abandon customs more suited to colder climates.

The following centres are serviced :—

Hostels—	Holding Camps—
Brooklyn	Mildura (closed June, 1952)
Fisherman's Bend	Benalla
Holmsglen	Rushworth
Royal Park	Somers
Maribyrnong	Bonegilla
Broadmeadows	West Sale.
South Yallourn	
Preston	
Ballarat.	

Of the 21 new municipal centres, eighteen were opened by Councils already engaged in this work and three by Councils not previously interested.

There are now only eight Councils which do not contribute to some form of infant welfare service. Mothers in these shires receive advice through the correspondence scheme.

Approval has also been given for the establishment of a service for mothers at the Puckapunyal camp. A building has been made available and a Departmental officer visits the mothers there weekly. A pre-school service will also be set up shortly. Two centres have been started in areas controlled by the State Rivers and Water Supply Commission in conjunction with neighbouring municipal services and arrangements are now being made for a service at Eildon.

Mobile circuits continue to provide a very valuable service for the mothers in the "out-back" areas. Some idea of what this service means to them may be gained from the pictures which were taken on the Orbost circuit.

Mobile Van on Circuit.

[This photograph, and those following, are reproduced by courtesy of *Woman's Day*.]

Left.—Baby lies happily on the measuring table and the toddler is busily occupied.

Below.—Sister Sergeant runs a tape measure over a toddler at the Cabbage Creek sawmills.

This circuit extends from Orbost to Mallacoota and north to Delegate on the border of New South Wales. Mothers in Mallacoota are over 100 miles from the nearest doctor. The mothers here and those around the timber mills on the route welcome sister's visits with much enthusiasm.

There are eight circuits in operation, including the two-nurse caravan operated by the Victorian Baby Health Centres Association in the Mallee, and subsidized by the Government. The other seven are Government circuits; the Government being responsible for the vehicle, its maintenance, and half the sister's salary plus extra cost-of-living allowance.

The Service is Free and for All.

One van is kept for replacement. Maintenance of the service necessitates regular checking of the vans and while one van is being overhauled the replacement van functions on the circuit. With seven circuits the replacement van is kept in almost continuous use. This practice, together with the provision of dual wheels for all vehicles, will provide a safe service for the sisters.

The correspondence scheme maintains its popularity and is of great value to mothers in municipalities without a service. Mothers from such areas as Otway Shire rely very largely on this scheme, as roads in these areas are dangerous and make any other form of service difficult.

Mothers Use All Means of Transport
to gain Infant Welfare Advice.

The number of letters of advice sent out by the Department for 1951 totalled 36,088.

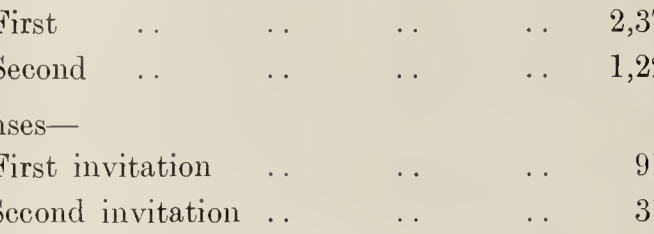
TABLE 7.—INFANT WELFARE CORRESPONDENCE SCHEME.

Invitations sent—	
(*a*) First	2,378
(*b*) Second	1,228
Responses—	
(*a*) First invitation	916
(*b*) Second invitation	317
Non-responses (cards returned)—	
(*a*) Attending centre	111
(*b*) Babies died	10
(*c*) Disinterested	51
Expectant mothers enrolled	115
Total number of ante-natal letters sent ..	543
Personal letters answered	2,377
Progress letters sent	29,694
Number of children enrolled since inauguration	19,219
Number of letters posted for year ..	36,088

BREAST FEEDING ANALYSIS.

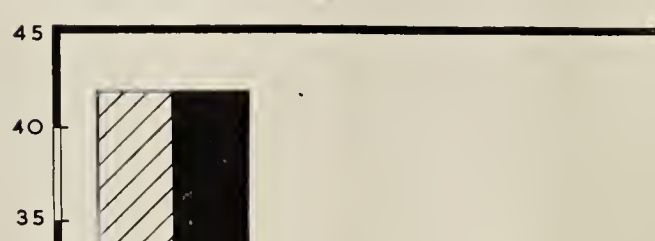
The feedings of infants at three months of age were studied by infant welfare inspectors, who noted the type of feeding of 5,048 infants attending 137 infant welfare centres during the year 1951.

These are compared with the feedings recorded on the record cards of 35,153 infants at six months of age attending infant welfare centres.



AT 3 MONTHS OF AGE

Diagram 2.



AT 6 MONTHS OF AGE

Diagram 3.

Analysis was also made of ages at which 2,096 infants being artificially fed at three months of age were weaned.

0–2 weeks, 879 infants weaned or 42 per cent. (approximately).

2–4 weeks, 306 infants weaned or 15 per cent. (approximately).

4–8 weeks, 481 infants weaned or 23 per cent. (approximately).

8–13 weeks, 430 infants weaned or 20 per cent. (approximately).

This information is shown diagramatically below.

AGE OF WEANING OF 2,096 INFANTS BEING ARTIFICIALLY FED AT THREE MONTHS OF AGE COMPARED WITH 1950 FIGURES.

Diagram 4.

With the expansion of the service, staffing of centres continues to be an ever-pressing problem. The needs of the service are barely met, but the Government's policy of providing three scholarships for training each quarter and the action of certain rural municipalities in providing residential accommodation for staff and thus securing more permanency has alleviated the problem somewhat.

The successful operation of the Department's bureau for relieving sisters has done much to maintain an uninterrupted service. During the year, 192 bookings were made for relieving sisters.

INFANT WELFARE TRAINING SCHOOLS.

TABLE 8.

The number of infant welfare nursing students trained per annum during the last three years is as follows :—

Training School.	Number of Trainees.		
	1949.	1950.	1951.
Presbyterian Babies' Home ..	12	14	15
Tandarra Foundling Hospital ..	20	16	16
Tweddle Baby Hospital ..	19	16	17
Victorian Baby Health Centres Association Training School	30	29	26

The total number of infant welfare sisters registered with the Nurses Board, Victoria, at the 31st December, 1951, was 1,484.

The Victorian Baby Health Centres Association Training School moved to its new home, the former Carlton Home, which has been remodelled to provide a modern infant welfare training school, which will also give a training for mothercraft nurses. The number of infant welfare sisters in training will be increased and valuable help is also given in providing refresher courses for graduates from other States or for Victorian graduates who wish to learn of more recent advances in child care.

The other three training schools continue to give valuable service. The infant welfare centre conducted by the Berry-street Foundling Hospital will cease at the end of June, as this service is now being provided by the Melbourne City Council at the Powlett-street Reserve. Trainees will receive their infant welfare training at centres approved by the Nurses' Board for the purpose and will be supervised by a Departmental officer.

MOTHERCRAFT TRAINING.

TABLE 9.

There are now nine approved mothercraft training schools, as follows :—

Training School.	Number of Trainees.	
	1950.	1951.
Bethany Babies' Home, Geelong ..	6	10
Foundling Hospital, Berry-street, East Melbourne	18	19
St. Joseph's Foundling Hospital, Broadmeadows	33	28
Methodist Babies' Home, Copelan-street, South Yarra	18	19
Presbyterian Babies' Home, 19 Canterbury-road, Camberwell	11	20
St. Gabriel's Church of England Babies' Home, Balwyn	17	14
Victorian Baby Health Centres' Association Training School, Carlton	..	..
Tweddle Baby Hospital, Barkly-street, Footscray	8	14
"Mountfield", Mont Albert-road, Canterbury	..	15

The number of mothercraft nurses who trained in 1951 showed a substantial increase on the previous year's figures ; 143 compared with 110 in 1950. This was due to trainees from "Mountfield" Training School taking the State examination for the first time and also to a slight increase in numbers being made at other training schools following arrangements for a short residential period for students at the Kindergarten Holiday Homes.

With the opening of the new Queen Elizabeth Maternal and Child Training Centre, an even greater increase in numbers is expected next year. There is no shortage of candidates for training. Most schools have long waiting lists, as the training is valued not only as a means of earning a living but as a sound foundation for marriage. The length of the course is also an attraction to many girls.

Five mothercraft nurses were successful in taking the post-graduate course at the Kindergarten Training College and obtained their pre-school registration.

The Department continues to provide a service for supervision of training and registration of mothercraft nurses. The bureau set up for engagement of mothercraft nurses also provides a very valuable service, both for the mother in the home and the mothercraft nurse seeking work. During the year, 1,040 cases were booked and 350 nurses supplied. The supply does not yet keep pace with the demand.

MOTHERCRAFT TEACHING IN SCHOOLS.

This service has extended considerably during the past year and much appreciation has been expressed. The subject has an appeal to all girls, and their enthusiasm is a reward and encouragement to the lecturers.

The following schools have been added to the Departmental roster during the year :—

Camberwell High School.
Mordialloc High School.
Fairfield North Central School.
Malvern Central School (Spring-road).
Camberwell Central School.
East Oakleigh Central School.
Caulfield Girls' Post Primary Grade.
Matthew Flinders Memorial Girls' School, Geelong.
Fitzroy State School.
Armadale State School.
West Breen State School.
St. Joseph's School, South Yarra.
Sacred Heart, Newport.
Holy Family, Brunswick.
"Korowa" Church of England Girls' Grammar School.

These schools are very different in type and the age groups of the girls range from 10 to 17 years.

Approval was given during the year for a subsidy to voluntary associations for a full time sister providing such a service. The Victorian Baby Health Centres Association has a full-time sister who lectures to 48 schools in the metropolitan area. The Truby King League has part-time sisters giving a service in the Sunshine, Footscray, and Dandenong areas.

Infant welfare sisters in country areas are giving this service when possible and schools in the following towns have had courses of lectures :—

Warrnambool	Colac	Birchip
Casterton	Swan Hill	Werrimull
Maryborough	Tatura	Manangatang
Numurkah	Donald	Daylesford.

PRE-SCHOOL.

Seven new kindergartens were established in 1951, bringing the total to 147. Pre-school play centres now number 45, ten additional ones being set up during the year.

Many centres have experienced great difficulty in meeting the higher maintenance costs due largely to the increase in staff salaries. Voluntary organizations have recently adopted the scale of salaries determined for primary teachers in secondary schools. The price of equipment has also increased. The committees responsible for the provision of all-day care have had an even heavier burden to carry, since in these centres the high cost of food is an added problem. Moreover, centres providing all-day care require staff from 8 a.m. to 5 p.m. or even longer. This necessitates rostering of staff and additional personnel to provide a forty-hour week for all. Such centres provide care for infants and very young children which necessitates additional staff.

The burden of maintaining all-day-care centres was felt to be so heavy by the Association of Creches and Day Nurseries that a deputation was made to the Minister regarding the possibility of increased enrolment at centres and modification of conditions of subsidy. The matters raised were carefully considered by Departmental and municipal officers and a report made to the Minister. Some increase in enrolment at some centres was made, but it was found that a number of these centres were not of sufficient size to permit economical staffing. The high cost of untrained staff and the lack of voluntary help seem to create an insoluble problem.

The question of permitting enrolment to be based on an average attendance was raised, because of the irregular attendance of children, particularly in the winter months.

In raising queries as regards the number of children to be handled by one teacher, it should be borne in mind that standards are actually set in training schools, and trained personnel can only be expected to work along the lines practised while training and that, should any radical change be contemplated, this would need to take effect first in such schools.

In spite of these difficulties the demand for pre-school care grows and requests for establishment have been received not only from pre-school groups but from institutions and hospitals where children need to receive care for long periods.

Lack of trained personnel hinders progress, but this year the Kindergarten Training College had a pleasing increase in enrolment in first-year students, more than 50 being enrolled. Forty-five applicants were also received for the six months pre-school play leaders course, although only twenty could be accommodated. The number of applicants for training for the post-graduate pre-school courses for infant welfare sisters and mothercraft nurses was disappointing.

In December, approval was given for the Maternal and Child Hygiene Branch to assume responsibility and issue certificates for an introductory course in child care for students of nursing bursaries. These students who are not old enough to commence nursing training are granted bursaries by the Hospital and Charities Commission. They undertake a course in practical work in subsidized pre-school centres, e.g., day nurseries and kindergartens, and attend a course of lectures arranged by the Department. The Hospital and Charities Commission provides £2 a week for each student and the committee conducting the pre-school centre provides an additional £2 a week. This arrangement provides assistance at centres at low cost and enables students to gain experience which will be a valuable foundation for nursing training.

Pre-school Building Regulations were gazetted on the 7th November, 1951, laying down requirements for pre-school centre buildings and bringing them under the authority of the Health Commission. Since these regulations came into force pre-school officers of this division have collaborated with inspectors of the Health Department's engineering branch in furnishing reports in regard to the suitability of buildings used as pre-school centres.

PRE-SCHOOL MEDICAL EXAMINATIONS.

Seventy-six (76) subsidized kindergartens have requested medical examination by pre-school medical officers of the Department of Health. All except two of these, namely, Benalla and Korumburra, received medical examination during 1951. Medical examination is given in other kindergartens by the Free Kindergarten Union medical officer (covering metropolitan kindergartens only), by municipal child welfare medical officers (Melbourne and South Melbourne), and by local doctors in some country centres and institutions.

Of the 43 subsidized play centres, 26 received medical examinations by Departmental pre-school medical officers, 6 were examined by their own doctors, and 11 country play centres received no medical examination, viz., Ballarat (2), Berwick (2), Donald, Harcourt, Merbein, Morwell, Maffra, Shepparton, and Leongatha.

Ten creches and day nurseries received medical examination by Departmental pre-school medical officers, nine metropolitan and one country (Bendigo). The five other centres were examined by their own doctors (Melbourne and South Melbourne).

The medical work comprised :—

74 kindergartens—225 sessions for 2,875 children examined.

26 play centres—70 sessions for 835 children examined.

10 creches—35 sessions for 323 children examined.

Pre-school medical officers delivered thirty addresses to parents in various centres at their request. Twenty-three lectures were given to trainees (pre-school play leaders and nursing bursary holders doing the pre-nursing course in child care). Six other lectures were given at general meetings.

Pre-school medical examination provides the parents with the opportunity to discuss with the doctor the standard of physical and mental development of the child. As a result the parent is encouraged to seek early treatment of any condition which may be detected and so prevent its progress to more serious illness or a troublesome behaviour problem.

The kindergarten director is advised of any improvement which might be made in her programme to further the health of the children, and her co-operation is elicited in the prevention of spread of infection by the carrying out of routine daily health inspection. [See Table 10.]

EMERGENCY HOUSEKEEPER.

Subsidy given for this service now covers four-fifths of the net cost to municipalities, with the Commonwealth reimbursing the State for expenditure over that of the base year (£1,220).

Miss Duncan was appointed organizer of this service for a six months period, and as a result of her campaign thirty-one (31) municipalities have established a service, seventeen country and fourteen metropolitan. It has been found that provision of residential accommodation helps recruitment and retention of staff. Kew, Hawthorn, and Prahran have provided hostels and South Melbourne and Caulfield plan to do so.

TABLE 10.—PRE-SCHOOL ANNUAL MEDICAL EXAMINATION, 1951.

Medical Officer.	Pre-School Centre.	Total Numbers.	Examined.	Local Doctor.	Not Examined.
Department Pre-school Medical Officers	Metropolitan Kindergartens	62	61	1*	Nil
	Independent	32	32	..	..
	Church of England	12	12	..	..
	Catholic	7	7	..	..
	Presbyterian	11	10	1*	..
	Metropolitan Play Centres	16	15	1*	Nil
	Independent	11	11	..	..
	Church of England	3	3	..	..
	Catholic	1	..	1*	..
	Presbyterian	1	1	..	..
	Country Kindergartens	17	13	2	2
	Independent	15	11	2	2
	Catholic	2	2	..	..
	Country Play Centres	24	11	2	11
	Independent	22	11	1	10
	Catholic	1	..	1*	..
	Presbyterian	1	..	..	1
Free Kindergarten Union Medical Officer	Metropolitan Kindergartens	29	26	1*	2
	Country Kindergartens	13	Nil	8	5
Municipal Medical Officers— Melbourne	.. ..	20	20	Nil	Nil
	Lady Gowrie Child Centre	1	1	..	..
	Independent Kindergartens	3	3	..	..
	Independent Play Centre	1	1	..	..
	Free Kindergarten Union Kindergartens	3	3	..	..
	Church of England Kindergartens ..	5	5	..	..
	Catholic Kindergartens	5	5	..	..
	Presbyterian Kindergartens	2	2	..	..
South Melbourne	.. ..	5	4	1	Nil
	Independent Play Centre	2	2	..	..
	Church of England Kindergartens ..	1	1	..	..
	Catholic Kindergartens	1	1	..	..
	Presbyterian Kindergartens	1	..	1	..
Total Number Subsidized Kindergartens	.. ..	143	121	13	9
Total Number Subsidized Play Centres	.. ..	43	29	3	11

* Pre-school centre in a children's home or hospital.

LITERATURE.

The Manual of Child Care has been published during the year and distribution has been made to all centres. The publication is very popular and is fulfilling a long-felt need.

STAFF.

There have been many changes in staff.

Dr. Kelso was granted twelve months' leave of absence to visit Great Britain. She will return to the Department at the beginning of 1953.

Miss Duncan, who was appointed organizer for home helps, also left for England in November. The emergency housekeeper service was then carried on by Mrs. McGain, who had recently returned and who undertook this work temporarily in addition to her infant welfare inspectorial duties.

Miss Allen and Miss de Morton resigned as infant welfare officers and left for England.

Dr. Ferguson and Dr. White resigned as half-time ante-natal officers and Dr. Ross and Dr. Mowlam were appointed for half-time ante-natal work.

Miss E. Walker, chief pre-school officer, resigned during the year owing to ill health. Miss Walker had given ten years' service to the Department in the pre-school field and pioneered much of the work.

Dr. Aikin has resigned her position as half-time pre-school medical officer to take the position of maternal and child welfare officer at Prahran. Her place has been taken by Dr. Dorothy Gepp.

TABLE 11.—EXPENDITURE, 1950–51.

	£	£
Salaries—		
Medical and Administrative	6,736	
Infant Welfare and Pre-school Staff ..	16,187	
Clerical Assistance	7,876	
		30,799
Subsidies, &c.—		
To Municipalities, Infant Welfare Centres, &c.	61,482	
To Infant Welfare, Mothercraft, and Kindergarten Training Schools	20,000	
Kindergartens and Pre-school Centres ..	66,142	
Creches and Day Nurseries	15,308	
Rail Passes	866	
Free Milk	1,500	
Pre-school Scholarships	8,492	
Capital Expenditure	25,772	
		199,562
Contingencies—		
Office Expenses	3,890	
Travelling Allowances	2,006	
Expenses Mobile Circuits	2,922	
		8,818
		239,179

RECOMMENDATIONS.

1. Provision of more Departmental staff to cope with extension of services.

2. As there is an increasing demand for pre-natal clinics by the metropolitan midwifery hospitals and by the mothers in the various municipalities, particularly those in the outer suburbs, it is recommended that adequate provision for this extension be made. The importance of this service has been stressed in my report.

3. Additional financial assistance to infant welfare training schools to enable them to maintain and improve training.

4. Increased assistance to municipalities so that 50 per cent. cost of the service is provided by the Government.

5. Increased subsidies to municipalities for the appointment of—

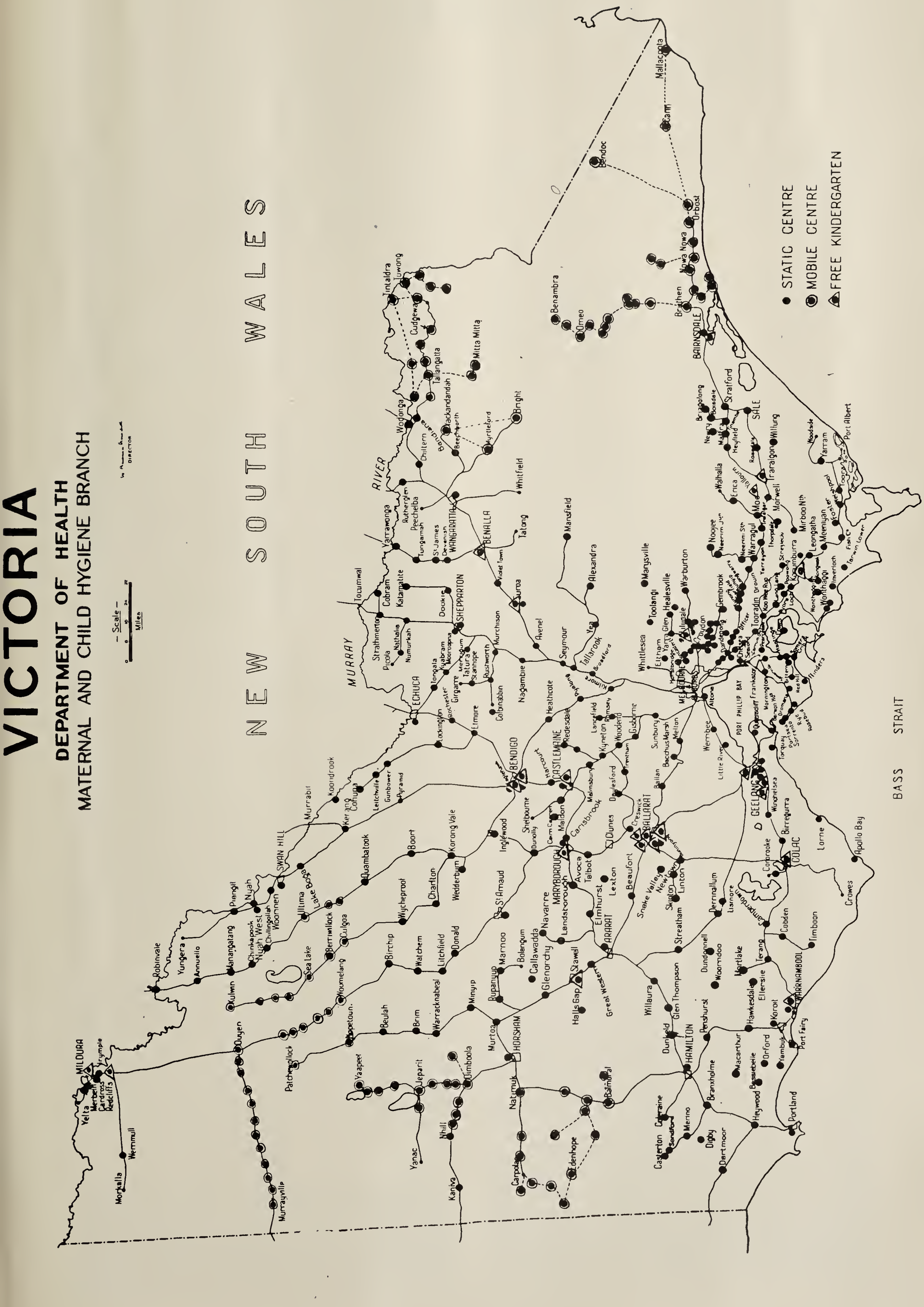
(*a*) Maternal and child welfare medical officer;

(*b*) Pre-school child development officer.

6. Provision of a subsidy to municipalities for the appointment of a trained social worker. This is especially necessary in municipalities where responsibility for all-day care of children is assumed.

7. Continued sponsoring of pre-school centres conducted along approved lines.

W. BARBARA MEREDITH, B.A., M.B., B.S.,
Director of Maternal, Infant, and Pre-school Welfare.


VICTORIA
DEPARTMENT OF HEALTH
MATERNAL AND CHILD HYGIENE BRANCH
- Scale -
Miles
DIRECTOR
NEW SOUTH WALES
MURRAY RIVER
BASS STRAIT
PORT PHILLIP BAY
STATIC CENTRE
MOBILE CENTRE
FREE KINDERGARTEN
MILDURA
Yelta
Merbein
Cardross
Redcliffs
Irymple
Werrimull
Morkalla
Robinvale
Yungera
Annuello
Manangatang
Piangil
Nyah
Chinkapook
Nyah West
Chillingollah
Woorinen
SWAN HILL
Ultima
Lake Boga
Murrabit
Kerang
Koondrook
Cohuna
Leitchville
Gunbower
Pyramid
Kulwin
Sea Lake
Berriwillock
Culgoa
Quambatook
Boort
Ouyen
Woomelang
Hopetoun
Patchewollock
Murrayville
Birchip
Wycheproof
Charlton
Korong Vale
Wedderburn
Watchem
Litchfield
Donald
Beulah
Brim
Warracknabeal
Minyip
Yaapeet
Jeparit
Dimboola
Nhill
Yanac
Kaniva
Murtoa
HORSHAM
Natimuk
Rupanyup
Marnoo
Bolangum
Callawadda
Glenorchy
Stawell
Halls Gap
Great Western
St Arnaud
Navarre
Landsborough
MARYBOROUGH
Avoca
Talbot
Lexton
Elmhurst
ARARAT
Inglewood
Dunolly
Shelbourne
Maldon
Carisbrook
Clunes
BENDIGO
CASTLEMAINE
Harcourt
Malmsbury
Daylesford
Kyneton
Woodend
Redesdale
Heathcote
ECHUCA
Lockington
Rochester
Elmore
Girgarre
Tongala
Kyabram
Mooroopna
Merrigum
Tatura
Stanhope
Rushworth
Colbinabbin
Murchison
Nagambie
Picola
Nathalia
Numurkah
Strathmerton
Tocumwal
Cobram
Katamatite
Dookie
SHEPPARTON
Yarrawonga
Tungamah
St James
Devenish
WANGARATTA
Peechelba
Rutherglen
Chiltern
Wodonga
Barnawartha
Yackandandah
Beechworth
Myrtleford
Bright
Whitfield
BENALLA
Tatong
Violet Town
Euroa
Avenel
Seymour
Tallarook
Broadford
Kilmore
Pyalong
Yea
Alexandra
Mansfield
Tallangatta
Mitta Mitta
Cudgewa
Tintaldra
Towong
Benambra
Omeo
Bruthen
BAIRNSDALE
Nowa Nowa
Orbost
Bendoc
Cann
Mallacoota
Briagolong
Boisdale
Newry
Maffra
Heyfield
Stratford
SALE
Rosedale
Willung
Traralgon
Walhalla
Erica
Yallourn
Moe
Morwell
Mirboo Nth
Noojee
Neerim Jn
Neerim Sth
Warragul
Yarragon
Trafalgar
Thorpdale
Strzelecki
Korumburra
Leongatha
Meeniyan
Foster
Welshpool
Toora
Yarram
Woodside
Port Albert
Fish Cr
Tarwin Lower
Inverloch
Wonthaggi
Drouin
Tooradin
Koo Wee Rup
Lang Lang
Pakenham
Officer
Dandenong
Gembrook
Warburton
Healesville
Yarra Glen
Lilydale
Croydon
Toolangi
Marysville
Whittlesea
Eltham
MELBOURNE
Altona
Frankston
Mornington
Dromana
Red Hill
Flinders
Rosebud
Rye
Sorrento
Portsea
Queenscliff
Torquay
GEELONG
Winchelsea
Werribee
Little River
Melton
Bacchus Marsh
Sunbury
Gisborne
Romsey
Lancefield
Ballan
Creswick
BALLARAT
Buninyong
Beaufort
Snake Valley
Newtown
Skipton
Linton
Streatham
Derrinallum
Lismore
Camperdown
Cobden
Timboon
Terang
Mortlake
Dundonnell
Woorndoo
Willaura
Glen Thompson
Dunkeld
HAMILTON
Penshurst
Hawkesdale
Ellerslie
Koroit
WARRNAMBOOL
Port Fairy
Yambuk
Orford
Macarthur
Bessiebelle
Heywood
Portland
Branxholme
Coleraine
Sandford
Casterton
Merino
Digby
Dartmoor
Balmoral
Edenhope
Carpolac
Birregurra
COLAC
Colac
Cororooke
Lorne
Apollo Bay
Crowes

REPORT OF THE SCHOOL HEALTH SERVICE, VICTORIA—1st JULY, 1951, TO 30th JUNE, 1952.

SUMMARY OF WORK.

Children Examined, 1951.

——	Boys.	Girls.	Total.
State Primary	23,807	18,777	42,584
Technical	3,071	576	3,647
Girls' Schools	..	1,372	1,372
High Schools	2,160	1,367	3,527
Registered Primary	4,363	3,939	8,302
Portsea Camp	3,058	2,731	5,789
Total	36,459	28,762	65,221

Teachers Examined. 1951.

——	Men.	Women.	Total.
Entrants, Superannuation, &c. ..	1,095	1,445	2,540
Sick Leave	133	201	334
	1,228	1,646	2,874

In addition, 204,293 examinations for cleanliness, infectious skin conditions, &c., were carried out by the nursing staff in schools in the metropolitan area and in provincial cities.

Staff.

Medical as on 30th June, 1952.	30th June, 1952.	30th June, 1951.
Chief Medical Inspector	1	(1)
Assistant Chief Medical Inspector ..	1	(1)
Medical Officers (full-time), male ..	10	(8)
Medical Officers (full-time), female ..	10	(6)
Medical Officers (part-time), male ..	1	(1)
Nurses	31	(25)
Clerical (full-time)	4	(2)
Clerical (part-time)	1	(1)
Disinfector	1	(1)

The increase in medical and nursing staff has enabled an increased number of children to be examined, i.e., 65,221, compared with 34,204 in 1950. This still falls short of the number which should be examined yearly if the whole State is to be covered every three years. With a "school" population of over 300,000, at least 100,000 should be the annual tally. Difficulty is still being experienced in obtaining medical men and women prepared to carry out country duties. Work is so arranged that each officer is not away from headquarters for more than three weeks at a time, but in the less closely settled parts of the State, schools are long distances from a centre, and roads and hotel accommodation frequently leave much to be desired. Special acknowledgment is, therefore, due to those medical officers and sisters who have carried out their duties so successfully in some of the most inaccessible areas in the State.

The nursing staff continues to do excellent liaison work with the parents. Each full-time medical officer is assisted by a school nurse at the time of examination, and sisters not employed in this way spend their time in the metropolitan area visiting each school at least twice each term and examining each child a minimum of three times each year for infectious skin and hair conditions. Opportunity is taken by the teachers at these visits to report any child showing any abnormality either physically or in behaviour, and a full investigation is made. Visits have also been paid to schools in Geelong, Bendigo, Shepparton, and Mildura. Cleanliness, as gauged by the prevalence of pediculosis, has improved, and an over-all average incidence of 1·9 per cent. may be considered very satisfactory, comparing favorably with the average of 2·2 per cent. for the previous twelve months.

Holidays have been arranged for many children through the much appreciated co-operation of the Ministering Children's League and the Santa Casa Committee.

Six additional sisters were appointed during the year to balance the parallel additions to the medical staff. The clerical staff continues to work under serious difficulties in accommodation as we have been unable to find any substitute for the room at Cambridge-street State School, kindly made available by the Education Department. Cards, &c., are sent out to schools in preparation for the visits of the medical officers, and this has proceeded smoothly in spite of the very cramped conditions.

Special mention must be made of the thorough and painstaking work of the School Disinfector. This officer has been absent on long-service leave during portion of the year, and all who have benefited from his twenty years of ungrudging service will join in wishing him a happy holiday abroad.

BUSH NURSES.

Visits to district schools have been paid by bush nurses in the following areas during 1951 :—

Balmoral, Dargo, Dingee, Drysdale, Elmhurst, Ensay, Glen Wills, and Lake Bolac.

The schools have been visited once a month or as frequently as their duties permitted, and talks on simple hygiene given and a routine examination carried out. The co-operation of the Bush Nursing Association and the valuable work done by the nurses in the schools is much appreciated.

CLEANSING CENTRES.

Centres in Brunswick, Coburg, and Collingwood have continued their work, and the sisters in charge have co-operated most willingly with the school sisters. These centres, established as a war-time emergency, have proved their worth, and a very great improvement in the cleanliness of the school children in these areas has resulted. The centre at Williamstown was closed down unfortunately during the year. A part-time centre was opened at Footscray.

CAMPS.

Examination of children who were to attend the Lord Mayor's Camp at Portsea was undertaken in conjunction with medical officers of the General Health Branch. To avoid interruption in the normal programme, two additional medical officers were given special short-term appointments of seven weeks each to examine children for the 1951–52 camps. With their

help, 1,811 children were given a full examination in their own school before proceeding to the camp. An assessment of the nutrition of this group showed that of 933 boys and 878 girls examined, 86 per cent. boys and 85·4 per cent. girls were classed as "average" nutrition, and 4·3 per cent. and 3·6 per cent. below, and 8·5 per cent. and 10·8 per cent. above respectively.

The routine examination of all children attending the Crow's Nest (Education Department) Camp at Queenscliff was carried on as in previous years until the closure of the Camp in May, 1952. Many children both city and country have derived much enjoyment and improvement in health by their stay of twelve days in this Camp, and it is much to be regretted that, owing to military requirements, the Camp could not be continued.

GENERAL.

The most important event of the year has been the separation of the School Medical and Dental Services. The School Medical Services commenced in Victoria in 1909, and it soon became apparent that dental defects were extremely common. After long advocacy by the then Chief Medical Inspector (Dr. Harvey Sutton), the Dental Service was inaugurated in 1919 with a staff of two dental officers and a building, formerly a military dental unit, which was erected on a site in St. Kilda-road near the South African Memorial. This building was after some years removed to the City-road site and was in use until January, 1951, when Hampton Lodge—also in St. Kilda-road—was purchased. The Dental Service has now become a separate unit. The urgent necessity for dental treatment is no less apparent now than in 1909, and the best wishes of the medical staff go to the recently appointed Deputy Director of Child Health (Dental) in his formidable task of administering school dental services.

The Free Milk Service provided by the Commonwealth has functioned for the greater part of the year though subject to some interruption due to short supplies. Only bottled and pasteurized milk is provided, and the general improvement in the children is commented upon by both teachers and school sisters.

A conference of Chief Medical Inspectors from each State in the Commonwealth was held in Sydney in September, 1951. Many interesting discussions took place. Two important decisions were made :—1. *re* the holding of regular refresher courses for medical officers, and 2. that a height and weight survey should be carried out in each State during 1952, results to be collated and analysed by the Institute of Child Health in Sydney to permit of standards of height and weight being drawn up for Australian children.

This survey is now taking place in Victoria and will be continued until the end of the school year.

Two excellent post-graduate courses for the medical officers have been held during the year. The first, held in Sydney under the auspices of the Institute of Child Health was attended by six from Victoria. A very comprehensive series of lectures on Public Health and Paediatrics was given at the Sydney University and Children's Hospital respectively during the last fortnight in January, and the opportunity to meet and exchange ideas with medical officers from other States was appreciated little less than the lectures and demonstrations.

The Medical Superintendent of the Children's Hospital, Melbourne, very kindly arranged a refresher course of lectures at the Hospital on clinical problems met with during routine examinations. These were given by paediatric specialists and were excellently adapted to the requirements of the School Medical Officers.

The retirement of the Chief Health Officer (Dr. Cole) in February, 1952, was a matter of much regret to this unit of the Maternal and Child Hygiene Branch. During his term of office, great expansion has taken place, and this was in no little measure due to his personal interest and helpful guidance. He has the sincere good wishes of the medical staff for many years of good health and happiness.

The willing and helpful co-operation of the social workers, almoners, &c., of the various hospitals, especially the Children's Hospital, of the various psychiatric clinics of the Mental Hygiene Authority, Children's Health Bureau (R.S.S.A.I.L.A.), Psychology Branch of the Education Department, &c., is gratefully acknowledged.

REMEDIAL GYMNASIUMS.

The correction of postural defects, such as round shoulders, flat chests, postural scoliosis, and flat feet, together with substandard general development and retardation in physical achievement is still being carried out at the three gymnasiums set up for that purpose.

Queensberry-street, Carlton, Lygon-street, North Carlton, and Elsternwick gymnasiums are capable of handling 450 children per term, i.e., a total of 1,350 per annum. Owing to difficulties in providing suitably trained staff, the gymnasium at Elsternwick has been working only half-time, being open for three days per week and confining its activities to girls' classes.

The preparations for the expected visit of His Majesty the late King George put a further strain on the special staff of the Physical Education Branch, and it was decided to suspend the remedial gymnasium work for the first term of 1952.

The school medical officers in their routine school inspections still find a considerable number of children who would derive great benefit from a course of special gymnasium exercises, and we see no evidence to lead us to alter our original estimate that 20 per cent. of children (more than 20,000 in Melbourne) require this service.

With increased staff, the School Medical Services are now in a position to give full co-operation in the event of further expansion of this service. Doctors are available to give complete medical examinations before admission to remedial classes and nurses to aid in having recommended medical treatment carried out, and so we hope that the Education Department can see its way to provide more gymnasiums and special staffs.

OPEN-AIR SCHOOL, BLACKBURN.

Regular supervision has been maintained by the School Sister who selects the children from State schools in the inner industrial area of the eastern suburbs. A school medical officer examines each child at the beginning of the year and re-visits the school each term. The number of children attending is limited to 25, and much improvement in their general health is shown in the course of the year.

PARTIALLY-SIGHTED CLASS, PIGDON-STREET, CARLTON.

This class has been kept under regular supervision by a medical officer. All children are given a special examination before admission, and an oculist's report obtained as to suitability, the condition of the eyes, and the time when an oculist's re-check is required. The average attendance remains about fifteen. The difficulty of transport from distant suburbs prevents the attendance of some children, the condition of whose eyes warrants admission.

SPEECH THERAPY.

There has been an increase in the number of children examined in regard to speech defects. Of 253 children who were referred to the School Medical Services on this account, 210 kept their appointments and were examined. These were disposed of as follows :—

Referred to Education Department's speech therapists	169
Referred to psychiatrist	7
Advised to seek medical or surgical treatment	40
Deferred for observation	15
Not suitable for speech therapy	22

HEARING DEFECTS.

The discovery of children whose education is retarded because of defective hearing has become more important now that facilities for helping and teaching such children have been improved.

During the year, 119 children have been examined at the School Medical Centre, with special reference to their hearing and with the following results :—

Referred to Deaf and Dumb Institute ..	1
Recommended to Commonwealth Acoustic Laboratory for provision of hearing aid ..	17
Advised to seek treatment by aurist ..	26
Recommended as suitable for new Oral School at Kew	43

Defects Found in 96 Children Attending Remedial Reading Classes, 1951.

Number Examined : 96 (77 *Boys and* 19 *Girls*).

——	Number.	Percentages.
Vision—		
Defect	5	5·2
Wearing glasses	1	1·0
1. Hearing	8	8·3
Nose and Throat—		
Defect notified	7	7·29
Previous operations	43	44·7
Teeth	19	19·8
Hair	2	2·0
Skin	6	6·2
2. Urinary	12	12·5
Postures, &c.	14	14·5
3. General Health	17	17·7
Habits—Nail biting, &c. ..	16	16·6
Speech	5	5·2

1. *Hearing.*—No gross defect was discovered. One child with defective hearing in both ears was under treatment ; seven had some hearing loss in one ear, and of these two has mastoid operations, four were under medical treatment, and one gave a history of recent abscess.

2. *Urinary.*—The twelve cases were all enuretic, one boy of twelve being a severe case.

3. *General Health.*—Eleven children were under treatment, three for frequent colds, five for " nerves, " two for " asthma " for which no allergic factor was found, and one for unsatisfactory general health. Three of the remainder were notified for poor general nutrition, and one child was overweight.

Four of the 96 children examined gave a history of minor truancy with some behaviour problems, and these were referred for psychiatric investigations.

Fourteen children (excluding the five children under treatment for " nerves ") gave evidence of insecurity and anxiety due to poor adjustment at school, probably because of reading failure and, in some cases, in addition to emotionally disturbed homes. Most of these showed improvement with success in remedial reading tuition and others are still under observation.

If unsatisfactory symptoms are still present when they are re-examined, these will be referred for further investigation by a psychiatrist.

Defects in 171 Special School Children Examined, 1951.

Number Examined : Boys 99, *Girls* 72 ; *Total*, 171.

——	Boys.	Girls.	Total.	Percentage.
1. Vision—				
Defects	14	7	21	12·0
Wearing glasses ..	12	9	21	12·0
Unable to test ..	22	16	38	22·0
2. Hearing	8	3	11	6·4
3. Teeth	29	33	62	36·0
Nose and Throat—				
Defects notified ..	8	11	19	11·0
Previous operation ..	49	30	79	46·0
Urinary	18	7	25	14·0
4. Heart	7	2	9	5·0
5. General Health	18	11	29	17·0
Hair	1	8	9	5·0
Skin	10	7	17	9·9
6. Posture	36	27	63	36·8
Habits—Nail biting, &c.	13	11	24	14·0
Speech	35	27	62	36·0
7. Other Defects	21	15	36	21·0

1. *Vision.*—In the total of 21 notified for defective vision, fifteen had squints, and those were referred for specialists' advice. The untestable children included those who had just been enrolled as well as those whose span of attention was too short to admit of accurate testing.

2. *Hearing.*—Of the total of eleven children with defective hearing, four were referred for audiometric tests. One received a hearing aid, and the others were referred for further treatment. Two of the remaining children were under treatment, three others had definite obstruction, and two were referred for investigation.

3. *Teeth.*—The majority of these children have received treatment since being examined by the School Medical Officer.

4. *Heart.*—Six of the nine children were under medical observation. The majority of the children were mongols with other congenital stigmata.

5. *General Health.*—Those already under treatment for recurrent colds, poor appetite, " nerves," asthma, and excessive weight are included as well as those referred for treatment for sub-standard general health. One child was under treatment for diabetes.

6. *Posture.*—Only poor postures are listed. Some are having medical treatment for faulty postures and foot deformities.

7. *Other Defects.*—The 36 children comprised fifteen (ten boys and five girls) with some degree of spasticity, twelve of whom attended hospital for treatment. Fourteen children (six boys and eight girls) under treatment for epilepsy, one boy with Jacksonian epilepsy under observation, three children under treatment for congenital deformities (two with feet and one with a hand), two with hemiparesis, and one child with achondroplasia.

Montague Special School staff is doing very good work in training the children in personal hygiene, in speech training, and in the correction of posture, gaits, and poor muscular control. This work is under the supervision of the medical officer and physical training instructor. Daily instruction for short periods with suitable games and exercises is given to very small graded groups of children who require special training to improve poor muscle co-ordination and movement. Even after a few months, the children show definite improvement in balance, gait, and co-ordination with a consequent gain in the child's personal assurance.

NUMBER OF CHILDREN EXAMINED FROM 1ST FEBRUARY, 1951, TO 30TH JUNE, 1951.

State Schools.	Primary Schools.		Technical Schools.		Girls' Schools.	High Schools.		Total.
	Boys.	Girls.	Boys.	Girls.		Boys.	Girls.	
Within 10-mile radius G.P.O. ..	5,118	3,242	930	..	702	..	..	9,992
Outer Suburban	3,777	1,796	..	..	..	..	..	5,573
Country	2,892	1,724	215	..	..	79	..	4,910
Registered Schools—								
Within 10-mile radius G.P.O. ..	1,273	1,278	..	..	..	..	..	2,551
Outer Suburban	254	272	..	..	..	..	..	526
Country	48	69	..	..	..	..	..	117
Portsea Camp	2,124	1,856	..	..	..	..	..	3,980
Total	15,486	10,237	1,145	..	702	79	..	..

Grand total—27,649

NUMBER OF CHILDREN EXAMINED FROM 1ST JULY, 1951, TO 31ST DECEMBER, 1951.

State Schools.	Primary Schools.		Technical Schools.		Girls' Schools.	High Schools.		Total.
	Boys.	Girls.	Boys.	Girls.		Boys.	Girls.	
Within 10-mile radius G.P.O. ..	7,629	7,687	1,630	482	670	1,653	1,154	20,905
Outer Suburban	807	664	..	..	..	..	..	1,471
Country	3,584	3,664	296	94	..	428	213	8,279
Registered Schools—								
Within 10-mile radius G.P.O. ..	2,194	1,955	..	..	..	..	..	4,149
Outer Suburban	..	..	..	..	..	..	..	..
Country	594	365	..	..	..	..	..	959
Portsea Camp	934	875	..	..	..	..	..	1,809
Total	15,742	15,210	1,926	576	670	2,081	1,367	..

Grand total—37,572.

Special Cases—1st January to 31st December, 1951.

Age.	Male.	Female.	Source of Reference: Education Department.							Reason.														Referred to Psychiatric Clinic.								
			Attendance Branch.	Teacher.	A.C.P.I. or Education Dept.	S.M.O. or Sister.	Psychology Branch.	Parent.	Hospital or Outside Agency.	Irregular Attendance.	Truancy.	Exemption.	Behaviour.	Home Conditions.	Physical Defects.	Mental Defects.	Correspondence.	Reading Tuition.	Speech.	Hearing.	Change of School.	Retarded.	Report.	Education.	Observatory Clinic.	Dr. Johnson.	Travancore.	Carlow House.	S.M.O. or Home Visit Special Exam.	Psychology Branch.	Hospital, &c.	S.P.C.C. Children's Welfare Dept.	R.S.L. Children's Health Bureau.
Pre-school	3	3	1	..	2	1	1	..	..	..	..	..	..	3	..	..	..	..	1	..	..	..	..	2	..	..	..	..	3	..	1	2	..
5..	12	8	1	2	6	8	1	1	1	..	..	..	2	1	4	5	..	..	1	..	1	1	1	4	..	..	..	..	18	..	1	1	..
6..	37	23	11	12	9	9	8	2	9	7	..	2	11	3	2	6	2	1	4	1	9	5	1	6	5	1	5	..	43	2	2	2	..
7..	44	32	17	3	11	25	10	3	7	8	2	..	11	3	6	9	7	1	2	2	14	8	..	3	5	2	8	1	53	2	2	3	..
8..	49	26	10	12	12	14	14	3	9	3	4	..	9	3	4	5	4	5	5	3	15	3	5	7	6	2	5	3	56	..	..	3	..
9..	53	25	14	4	12	13	25	5	5	8	1	1	9	3	3	..	6	20	1	3	12	5	3	3	4	2	4	1	64	1	..	2	..
10..	50	23	21	4	10	12	14	4	8	7	1	..	8	1	5	6	9	13	..	4	8	3	5	3	3	3	4	2	59	1	1	..	..
11..	27	34	12	8	7	20	10	..	5	3	2	1	11	3	3	4	6	4	1	5	11	3	1	3	6	3	2	1	42	1	2	2	1
12..	38	31	28	1	6	14	12	3	5	16	4	6	12	4	1	5	5	6	..	1	6	2	1	1	9	2	3	3	50	1	1	..	..
13..	42	48	47	7	6	15	9	1	5	23	3	17	11	3	7	1	..	6	1	2	8	1	3	5	3	1	2	4	74	1	2	1	2
14..	5	5	..	3	2	4	1	..	..	..	..	..	1	..	3	1	..	..	1	..	..	1	..	3	2	..	1	1	6	..	..	..	..
15..	4	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	1	..	2	..	1	..	1	..	..	..	3	..	..	..	..
16..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..
Age not given	23	12	9	7	6	8	2	2	1	13	..	..	7	2	3	1	7	..	1	1	4	2	..	2	4	1	2	1	25	..	1	1	..
Total	387	271	171	63	89	144	108	25	56	88	17	27	92	29	41	43	46	56	19	22	91	34	21	42	48	17	36	17	497	9	13	17	3

Total—658 cases plus 29 families.

Defects in Boys and Girls Attending State Schools from February, 1951, to 30th June, 1951.

Expressed as Percentages of the Numbers Examined.

Type of School.	Number Examined.	Vision.		Hearing.	Nose and Throat.		Dental.			Hair.	Heart.	Anaemia.	Skin.	Feet.	Other Defects.	Free from Defects.
		Uncorrected Defects.	Wearing Glasses.		Defects.	Operations.	Dental.	Fillings.	Plates.							
Primary Schools (Higher, Elementary, and Central Included.)																
Metropolitan—																
State—																
Boys	8,895	3·08	·07	2·37	9·17	23·73	23·62	5·38	..	·28	·27	..	1·78	·6	·61	61·34
Girls	5,038	4·76	·36	1·77	12·49	29·40	39·42	3·06	..	2·62	·42	..	1·09	·97	·58	47·72
Registered—																
Boys	1,527	4·65	·46	1·38	7·4	20·1	17·35	4·52	..	·33	·59	..	2·23	·79	·72	87·68
Girls	1,550	6·65	·26	2·84	10·06	26·32	54·84	1·94	..	3·74	·26	..	2·90	1·10	1·03	39·61
Country—																
State—																
Boys	2,892	3·67	·10	2·63	10·68	20·44	27·8	·1	..	·66	·1	..	1·07	3·53	·1	56·60
Girls	1,724	4·81	·17	2·84	12·93	25·64	44·61	3·77	..	1·68	·58	..	·81	1·04	1·33	50·42
Registered—																
Boys	48	6·25	..	..	25·00	14·38	22·92	..	..	..	..	..	..	..	..	56·25
Girls	69	4·35	..	..	..	84·06	86·96	..	..	2·90	..	..	5·80	..	..	82·61
Total—																
Boys	13,362	3·40	·12	2·25	9·35	30·73	23·81	4·42	..	·37	·27	..	1·67	1·25	·51	63·31
Girls	8,381	5·12	·29	2·17	12·03	28·50	43·73	2·97	..	2·64	·42	..	1·44	1·00	·81	47·06
Portsea Camps (10)—																
Boys	2,124	2·59	..	2·17	10·17	19·68	30·18	1·65	..	..	·33	..	·56	·42	..	39·50
Girls	1,856	4·36	·11	3·18	13·95	25·38	34·43	2·10	..	1·19	·43	..	·54	·92	..	41·97
Secondary Schools.																
Metropolitan—																
Technical—																
Boys	930	2·04	·86	1·18	26·77	18·28	5·38	..	..	..	..	..	..	·43	1·08	75·81
Girls	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
High Schools—																
Boys	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Girls	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Girls' Schools ..	702	8·97	·85	2·71	9·26	30·48	42·16	2·85	..	4·56	·28	..	·43	·85	·28	52·71
Country—																
High Schools—																
Boys	79	6·33	..	..	3·80	11·39	44·3	39·24	..	..	..	..	3·8	6·33	3·8	41·77
Girls	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Technical—																
Boys	215	3·72	..	..	36·74	46·51	40·0	4·86	..	..	..	..	..	13·95	..	13·023
Girls	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total—																
Boys	1,224	2·61	..	·65	7·60	29·25	23·77	13·97	..	..	..	..	·25	3·19	1·06	83·17
Girls	702	8·97	·85	2·71	9·26	30·48	42·17	2·85	..	4·56	·28	..	·43	·85	·28	52·71
Grand Total—																
Boys	16,710	3·24	·10	2·12	9·33	29·22	24·62	4·76	..	·29	·26	..	1·42	1·29	·48	61·74
Girls	10,939	5·24	·29	2·38	12·18	28·10	42·05	2·82	..	2·51	·41	..	1·20	·98	·64	46·56

Defects in Boys and Girls Attending State Schools from 31st July to 31st December, 1951.

Expressed as Percentages of the Numbers Examined.

Type of School.	Number Examined.	Vision.		Hearing.	Nose and Throat.		Dental.			Hair.	Heart.	Anaemia.	Skin.	Feet.	Other Defects.	Free from Defects.
		Incorrected Defects.	Wearing Glasses.		Defects.	Operations.	Dental.	Fillings.	Plates.							
Primary Schools (Higher Elementary and Central Included).																
Metropolitan—																
State—																
Boys	8,436	4·09	·23	1·90	6·08	20·24	17·15	9·38	..	·26	·37	·04	·75	2·99	1·23	50·78
Girls	8,351	5·6	·86	·41	6·65	32·73	35·52	7·68	..	3·45	·38	·06	2·01	2·07	1·11	74·40
Registered—																
Boys	2,194	5·74	1·05	1·41	12·67	27·03	16·18	·50	..	·09	·32	·09	1·82	4·24	1·14	43·44
Girls	1,955	1·64	..	1·13	4·91	31·36	35·81	5·37	..	5·75	·31	..	2·05	1·87	·61	38·77
Country—																
State—																
Boys	3,584	4·80	·31	2·62	9·38	20·31	29·49	8·37	..	·45	·31	..	1·75	3·77	3·36	53·91
Girls	3,664	5·19	·68	2·54	9·14	21·45	33·83	9·30	..	2·05	·52	..	1·56	1·34	·19	59·12
Registered—																
Boys	594	3·03	..	5·39	14·48	24·41	35·86	8·25	..	·84	·84	..	·67	7·41	..	43·60
Girls	465	3·66	..	1·94	7·31	26·67	43·23	7·96	..	9·89	·22	..	1·94	3·01	·86	23·01
Total—																
Boys	14,808	4·46	·29	2·14	8·19	21·43	20·75	7·77	..	1·30	·31	·03	1·14	3·54	1·66	50·16
Girls	14,435	4·89	·67	1·10	7·07	29·53	35·12	4·78	..	3·62	·40	·04	1·90	1·75	1·0	48·42
Portsea Camps (10)—																
Boys	934	3·21	·43	2·89	6·10	21·20	31·69	1·93	..	·11	·32	..	·54	·86	..	50·21
Girls	875	2·97	·23	2·63	6·63	17·94	31·43	3·20	..	·23	·34	..	·11	2·9	..	50·40
Secondary Schools.																
Metropolitan—																
Technical—																
Boys	1,630	3·50	·31	1·90	·74	39·63	33·60	20·81	·06	..	·18	..	·55	·25	1·23	60·49
Girls	482	..	·83	·62	3·73	20·24	26·56	23·86	·21	2·70	·62	..	3·94	3·73	1·45	71·16
High Schools—																
Boys	1,653	1·94	..	1·15	1·39	22·87	22·32	6·11	·30	..	·12	..	1·33	4·78	·91	60·25
Girls	1,154	5·72	·16	1·21	7·11	24·44	38·65	20·62	..	·52	·95	..	1·30	1·91	·61	46·10
Girls Schools	670	7·02	2·24	·60	6·42	42·39	41·79	13·58	..	1·79	·60	..	2·39	1·19	·75	14·63
Country—																
Technical—																
Boys	296	6·42	..	5·59	19·93	25·0	22·97	14·87	..	..	..	..	4·05	8·45	1·35	6·42
Girls	94	2·13	..	1·06	6·38	39·36	43·62	..	..	·06	..	..	3·19	..	..	28·72
High Schools—																
Boys	428	2·10	..	1·17	6·78	32·94	22·90	23·60	..	·23	..	..	2·10	9·81	2·57	37·15
Girls	213	7·51	..	1·41	3·29	42·25	46·48	38·03	..	..	·47	..	6·57	4·69	·94	45·07
Total—																
Boys	4,007	2·92	·13	1·80	3·07	30·92	27·0	15·42	·15	·03	·13	..	1·30	3·74	1·25	53·91
Girls	2,613	5·01	1·0	·96	5·97	30·65	38·04	20·09	·04	1·23	·73	..	2·56	2·22	·80	41·94
Grand Total—																
Boys	19,749	4·09	·27	2·11	7·05	23·34	22·53	9·05	·03	·24	·27	·03	1·14	3·45	1·50	50·92
Girls	17,923	4·82	·70	1·15	6·89	29·14	35·37	9·35	·01	3·10	·45	·03	1·91	1·88	·92	47·57

DEFECTS FOUND IN SCHOOL CHILDREN BY SCHOOL SISTERS, JANUARY, 1951, TO DECEMBER, 1951.

State School—Defects.

Municipality.	Attendance.	Examinations.	Hair.		Impetigo.	Scabies.	Dirty.	Ringworm.	Other Skin Conditions.
			Percentage Incidence.	Number of Cases.					
Box Hill	50	50	..	..	..	..	..	..	2
Braybrook	2,809	6,778	1·3	93	6	3	1	7	12
Brighton	440	440	..	..	..	1	..	..	1
Brunswick	4,281	11,102	1·3	149	9	8	10	7	6
Camberwell	1,520	3,060	·39	12	8	..	..	6	9
Coburg	4,900	15,300	·82	126	21	2	1	19	53
Collingwood	2,517	6,597	3·6	243	26	6	56	..	18
Essendon	4,500	10,330	·50	52	9	1	..	2	19
Fitzroy	2,069	5,777	3·0	174	7	1	4	..	8
Footscray	5,821	13,363	1·0	145	93	7	..	6	18
Hawthorn	1,090	2,890	2·1	63	..	..	1	1	4
Heidelberg	2,300	5,300	1·7	95	3	..	5	3	24
Malvern	800	2,400	·16	4	..	..	..	..	1
Melbourne	4,360	12,080	4·1	512	24	3	30	6	24
Moorabbin	3,424	5,424	·42	23	2	1	1	4	12
Northcote	3,360	9,780	1·0	107	13	1	..	6	40
Oakleigh	1,000	3,000	2·0	60	..	1	2	3	23
Port Melbourne	1,200	3,600	2·6	99	..	..	11	1	2
Prahran	3,400	9,800	1·5	148	7	1	..	1	11
Preston	5,360	11,080	·64	71	2	2	4	2	23
Richmond..	2,000	6,000	1·6	96	..	..	17	..	10
Sandringham	950	950	..	..	2	..	..	..	3
St. Kilda	1,320	2,640	·45	12	1	..	..	..	3
South Melbourne	1,650	4,500	1·8	82	..	..	20	3	9
Williamstown	3,630	7,450	·40	30	31	1	..	1	13
Beach Schools	2,790	3,990	1·1	44	1	..	..	5	24
Country	10,268	14,136	2·2	322	18	7	24	13	184
Geelong	4,009	5,049	2·7	138	73	..	..	4	2
Bendigo	4,179	9,349	1·5	148	16	..	30	2	13
Shepparton	4,463	9,657	3·8	375	7	2	2	5	24
Mildura	2,421	2,421	1·9	48	4	1	16	2	3
Total	92,881	204,293	..	3,471	383	49	235	109	598
Percentage ..	..	..	..	1·6	·18	·02	·11	·05	·29

DEFECTS FOUND IN SCHOOL CHILDREN BY SCHOOL SISTERS—JANUARY, 1951, TO DECEMBER, 1951.

Defects—Registered Schools.

Municipality.	Attendance.	Examinations.	Hair.		Impetigo.	Scabies.	Dirty.	Ringworm.	Other Skin Conditions.
			Percentage Incidence.	Number of Cases.					
Box Hill	..	..	..	..	..	..	..	..	..
Braybrook	500	1,500	2·9	44	..	..	1	1	3
Brighton	..	..	..	..	..	..	..	..	..
Brunswick	2,467	7,251	1·9	171	9	10	2	4	10
Camberwell	660	660	·75	5	1	..	..	..	..
Coburg	1,600	4,800	·91	44	22	..	..	..	22
Collingwood	1,080	2,060	5·6	117	17	3	8	2	1
Essendon	2,145	5,585	1·1	67	6	1	1	1	11
Fitzroy	950	2,700	6·3	170	8	..	17	..	9
Footscray	1,642	3,726	2·3	86	28	17	1	3	8
Hawthorn	..	..	..	..	..	..	..	..	..
Heidelberg	558	1,338	·77	10	..	..	3	..	4
Malvern	720	720	1·5	11	3	..	..	..	1
Melbourne	2,955	7,275	6·0	443	16	3	13	1	7
Moorabbin	..	..	..	..	..	..	..	..	..
Northcote	920	2,760	3·3	93	1	..	..	1	11
Oakleigh	..	..	..	..	..	..	..	..	..
Port Melbourne	400	1,200	2·6	32	..	..	6	1	4
Prahran	700	2,100	1·3	29	1	6	..	2	2
Preston	2,020	4,040	·79	32	..	..	..	..	14
Richmond..	860	2,180	2·0	44	..	..	3	1	3
Sandringham	..	..	..	..	..	..	..	..	..
St. Kilda	625	1,275	1·3	17	..	..	..	..	..
South Melbourne	1,490	3,290	2·2	73	..	..	11	..	2
Williamstown	900	2,630	1·5	40	8	1	2	6	3
Beach Schools	515	1,310	1·0	14	12	1	..	1	10
Country	733	1,333	1·8	27	2	..	5	3	3
Geelong	948	1,148	3·7	43	5	1	..	2	3
Bendigo	641	801	2·4	20	2	..	..	..	3
Shepparton	300	700	10·0	70	..	..	..	3	1
Mildura	495	495	2·4	12	..	..	..	1	..
Total	26,824	62,877	..	1,681	141	43	73	33	135
Percentage ..	..	..	..	2·6	·22	·06	·11	·05	·21

DEFECTS FOUND IN SCHOOL CHILDREN BY SCHOOL SISTERS—JANUARY, 1951, TO DECEMBER, 1951.

Total Defects.

Municipality.	Attendance.	Examination.	Hair.		Impetigo.	Scabies.	Dirty.	Ringworm.	Other Skin Conditions.
			Percentage Incidence.	Number of Cases.					
Box Hill	50	50	..	..	..	..	..	..	2
Braybrook	3,309	8,278	1·6	137	6	3	2	8	15
Brighton	440	440	..	..	..	1	..	..	1
Brunswick	6,748	18,353	1·5	290	18	18	12	11	16
Camberwell	2,180	3,720	0·45	17	9	..	..	6	9
Coburg	6,500	20,100	·84	170	43	2	1	19	75
Collingwood	3,597	8,657	4·1	360	43	9	64	2	19
Essendon	6,645	15,915	·74	119	15	2	1	3	30
Fitzroy	3,019	8,477	4·0	344	15	1	21	..	17
Footscray	7,463	17,089	1·3	231	121	24	1	9	26
Hawthorn	1,090	2,890	2·1	63	..	..	1	1	4
Heidelberg	2,858	6,638	1·5	105	3	..	8	3	28
Malvern	1,520	3,120	·48	15	3	..	..	..	2
Melbourne	7,315	19,355	4·9	955	40	6	43	7	31
Moorabbin	3,424	5,424	·42	23	2	1	1	4	12
Northcote	4,280	12,570	1·5	200	14	1	..	7	51
Oakleigh	1,000	3,000	2·0	60	..	1	2	3	23
Port Melbourne	1,600	4,800	2·7	131	..	..	17	2	6
Prahran	4,100	11,900	1·4	177	8	7	..	3	13
Preston	7,380	15,120	·68	103	2	2	4	2	37
Richmond..	2,860	8,180	1·7	140	..	..	20	1	13
Sandringham	950	950	..	..	2	..	..	..	3
St. Kilda	1,945	3,915	·74	29	1	..	..	..	3
South Melbourne	3,140	7,790	1·9	155	..	..	31	3	11
Williamstown	4,530	10,080	·69	70	39	2	2	7	16
Beach Schools	3,305	5,300	1·0	58	13	1	..	6	34
Country	11,001	15,469	2·2	346	20	7	29	16	187
Geelong	4,957	6,197	2·9	181	78	1	..	6	5
Bendigo	4,820	10,150	1·6	168	18	..	30	2	16
Shepparton	4,763	10,357	4·2	445	7	2	2	8	25
Mildura	2,916	2,916	2·0	60	4	1	16	3	3
Total	119,705	267,170	..	5,152	524	92	308	142	733
Percentage ..	..	..	1·9		·19	·03	·11	·05	·23

Summary—Areas and Numbers Examined, 1951.

	Boys.	Girls.	Total.
Region of Port Phillip—			
City of—			
Melbourne	2,560	1,538	4,098
Box Hill	825	..	825
Brighton	935	275	1,210
Brunswick	2,492	2,871	5,363
Caulfield	895	..	895
Chelsea	770	459	1,229
Coburg	1,214	2,344	3,558
Collingwood	503	178	681
Essendon	2,251	2,047	4,298
Fitzroy	..	978	978
Footscray	2,683	2,692	5,375
Hawthorn	460	207	667
Moorabbin	410	..	410
Mordialloc	824	707	1,549
Northcote	1,016	842	1,858
Nunawading	52	158	210
Preston	1,722	1,633	3,355
Sandringham	879	60	939
South Melbourne	845	..	845
Sunshine	907	709	1,616
Williamstown	1,909	1,038	2,947
Borough of Ringwood	336	297	633
Shire of—			
Bacchus Marsh	391	370	761
Braybrook	283	139	422
Broadmeadows	415	291	706
Cranbourne	56	60	116
Dandenong	437	605	1,042
Doncaster and Templestowe	86	87	173
Ferntree Gully	894	939	1,833
Flinders	442	321	763
Frankston and Hastings	1,153	635	1,788
Healesville	7	2	9
Keilor	125	144	269
Lilydale	812	876	1,688
Melton	72	83	155
Mornington	173	219	392
Upper Yarra	259	203	462
Werribee	553	491	1,044
Region of East Gippsland—			
City of Sale	588	458	1,046
Shire of—			
Avon	121	129	250
Bairnsdale	859	289	1,148
Maffra	272	525	797
Rosedale	170	123	293
Tambo	10	7	17
Region of Gippsland—			
Shire of—			
Alberton	14	9	23
Berwick	84	88	172
Region of Glenelg—			
City of Hamilton	392	388	780
Shire of—			
Ararat	731	724	1,455
Minhamite	43	62	105
Mount Rouse	7	4	11
Region of Goulburn—			
City of Shepparton	458	524	982
Shire of Rodney	99	109	208
Region of Loddon—			
City of Bendigo	850	394	1,244

Schools Examined, 1951.

	Number Examined.	
	Boys.	Girls.
Region of Port Phillip—		
City of Melbourne—		
Flemington Girls' School	..	334
Flemington	265	..
Kensington	237	219
Rathdown-street, Carlton	168	175
T.C. Rural School, Carlton	..	46
Princes Hill	352	325
Lee-street, Carlton	320	..
Faraday-street, Carlton	88	78

Schools Examined, 1951—*continued.*

	Number Examined.	
	Boys.	Girls.
Region of Port Phillip—*continued.*		
City of Melbourne—*continued :—*		
Errol-street, North Melbourne	312	..
King-street, West Melbourne	273	..
St. Mary's, North Melbourne	278	231
St. Mark's, Carlton	37	..
St. Michael's, North Melbourne	230	130
City of Box Hill—		
Box Hill High School	603	..
Salvation Army Boys' Home	117	..
St. Joseph's, Surrey Hills	105	..
City of Brighton—		
Brighton Technical	382	275
Gardenvale	553	..
City of Brunswick—		
South Brunswick	293	256
East Brunswick	235	224
West Brunswick	331	280
South West Brunswick	293	337
North West Brunswick	..	204
Albert-street, Brunswick	338	339
North Brunswick	212	240
St. Ambrose's, Brunswick	311	230
St. Joseph's, West Brunswick	189	254
Holy Family, East Brunswick	30	65
Our Lady's, East Brunswick	72	208
St. Margaret Mary's, Brunswick	188	234
City of Caulfield—		
Caulfield Technical	461	..
Murrumbeena	434	..
City of Chelsea—		
Edithvale	222	232
Aspendale	37	99
Chelsea	263	..
Carrum	135	..
St. Joseph's, Chelsea	113	128
City of Coburg—		
Coburg East	293	254
Coburg West	..	444
North Coburg	139	150
Merlynston	132	252
Pascoe Vale	374	339
Coburg	..	470
Moreland	276	286
Newlands	..	149
City of Collingwood—		
Collingwood Girls' School	..	178
Collingwood Technical	503	..
City of Essendon—		
Essendon	412	..
Essendon North	290	351
Essendon High School	..	570
Aberfeldie	178	75
Moonee Ponds	275	261
Moonee Ponds West	316	290
Ascot Vale	284	..
Ascot Vale West	72	..
Ascot Vale, St. Mary's	212	..
St. Theresa's, Essendon	..	234
St. Monica's, Moonee Ponds	212	266
City of Fitzroy—		
Alfred-crescent	..	204
Falconer-street	..	206
George-street	..	188
Miller-street	..	190
Girls' School	..	190
City of Footscray—		
Hyde-street, Footscray	..	432
Geelong-road, Footscray	350	..
Footscray North	402	352
Kingsville	330	..
Yarraville	188	198
Yarraville West	349	302
Tottenham	402	430
St. John's, Footscray	..	322
St. Augustine's, Yarraville	510	381
St. Monica's, Footscray	100	212
St. Flannan's, Kingsville	52	63

SCHOOLS EXAMINED, 1951—*continued.*

	Number Examined.	
	Boys.	Girls.
Region of Port Phillip—*continued.*		
City of Hawthorn—		
Swinburne Technical	460	207
City of Moorabbin—		
Gordon Boys' Home	22	..
Moorabbin	388	..
City of Mordialloc—		
Mordialloc	232	189
Mordialloc High School	200	320
Mentone	240	..
Parkdale	170	198
City of Northcote—		
Helen-street	431	370
Wales-street	254	342
Hutton-street, Thornbury	331	..
Penders-grove	..	130
City of Nunawading—		
Mitcham	..	158
Tally Ho	52	..
City of Preston—		
West Preston	..	72
South Preston	338	..
East Preston	357	..
Tyler-street, Preston	448	..
Bell	..	314
Reservoir	..	447
Girls' School	..	800
Sacred Heart, Preston	265	..
Holy Name, Preston	84	..
St. Raphael's, Preston	230	..
City of Sandringham—		
Sandringham	350	..
Sandringham East	219	..
Beaumaris	76	60
Black Rock	234	..
City of South Melbourne—		
South Melbourne Technical School	470	..
Middle Park	375	..
City of Sunshine—		
Sunshine	456	276
Sunshine Technical School	284	297
Albion	167	136
City of Williamstown—		
Williamstown	234	..
Williamstown North	507	332
Williamstown High School	310	406
Newport	412	..
Spotswood	140	..
St. Mary's, Williamstown	156	136
Sacred Heart, Newport	150	164
Borough of Ringwood—		
Ringwood	253	228
Ringwood East	83	69
Shire of Bacchus Marsh—		
Bacchus Marsh	125	137
High School, Bacchus Marsh	76	58
Myrniong	21	14
Glenmore	60	30
Balliang	7	18
Coimadai	9	10
Balliang East	7	11
Exford	3	6
St. Bernard's, Bacchus Marsh	83	86
Shire of Braybrook—		
Braybrook	141	83
Maribyrnong	84	..
Deer Park	58	56
Shire of Broadmeadows—		
Broadmeadows	28	23
Campbellfield	11	7
Fawkner	139	98
Glenroy	160	111
Westbreen	77	52

SCHOOLS EXAMINED, 1951—*continued.*

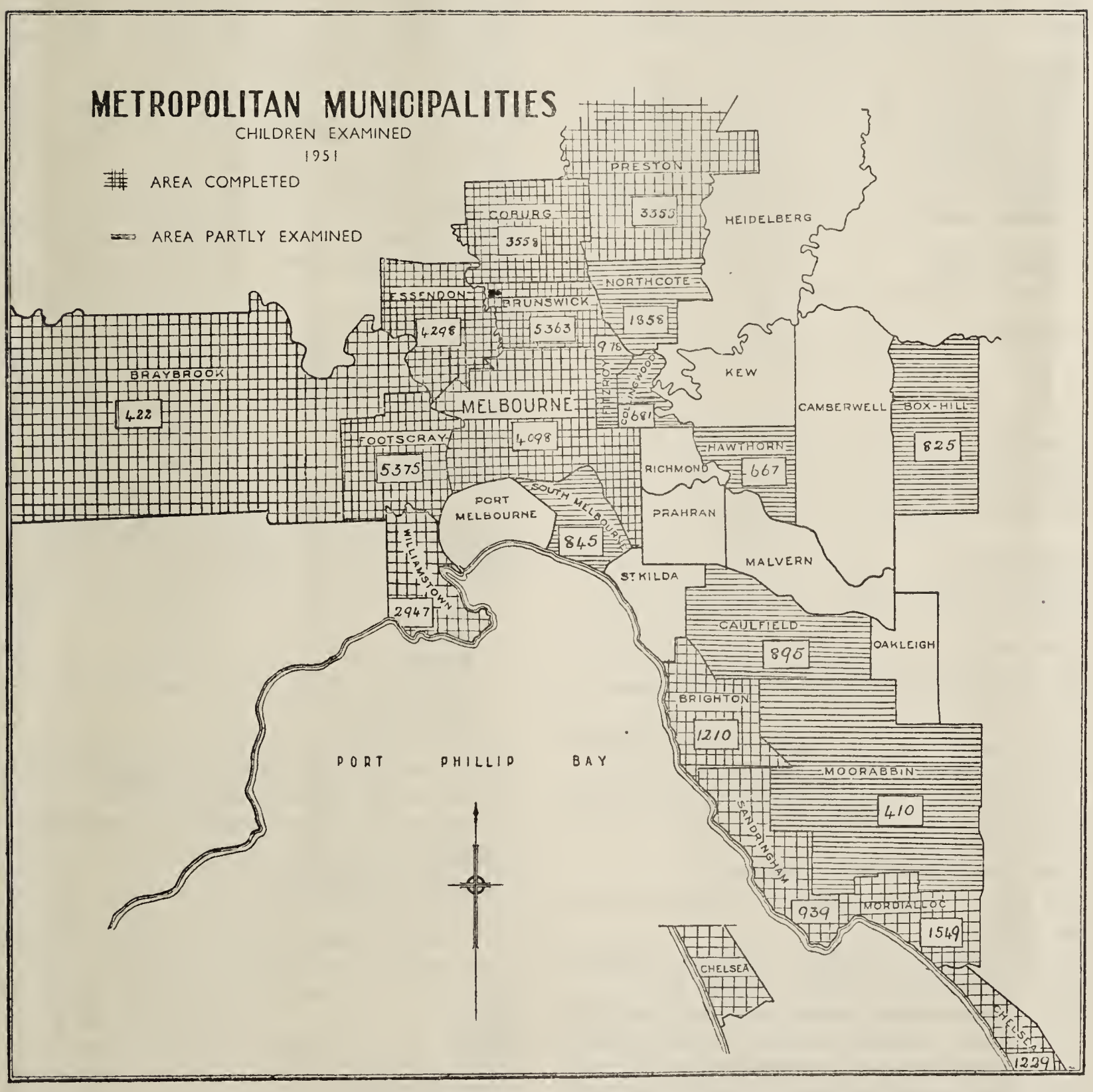
	Number Examined.	
	Boys.	Girls.
Region of Port Phillip—*continued.*		
Shire of Cranbourne—		
Pearcedale	40	45
Hampton Park	16	15
Shire of Dandenong—		
Dandenong High School	254	428
Dingley	13	55
Bangholme	7	11
Carrum Downs	51	14
Keysborough	16	14
St. Joseph's, Springvale	96	83
Shire of Doncaster and Templestowe—		
Warrandyte	58	59
Warrandyte South	28	28
Shire of Ferntree Gully—		
Upper Ferntree Gully	54	43
Lower Ferntree Gully	81	79
Bayswater	253	79
Bayswater North	25	14
The Basin	71	62
Boronia	20	196
Scoresby	1	32
Upwey	11	80
Belgrave	139	124
Emerald	43	65
Belgrave South	43	47
Salvation Army Boys' Home, Bayswater	51	..
Sassafras	24	36
Ferny Creek	16	20
Macclesfield	11	14
Kallista	13	12
Menzies Creek	15	15
Narre Warren East	10	13
Lysterfield	13	8
Shire of Flinders—		
Red Hill Consolidated	130	153
Somers Migrant Camp	85	112
Somers	13	12
Bittern	7	7
Crib Point	39	37
Dromana	54	..
Rosebud	114	..
Shire of Frankston and Hastings—		
Frankston	422	368
Frankston High School	286	..
Frankston Boys' Home	98	..
Hastings	54	43
Tyabb Railway Station	11	21
Tyabb	7	6
Somerville	32	41
Baxter	31	28
Langwarrin North	27	24
Seaford	87	..
St. Francis Xavier's, Frankston	98	104
Shire of Healesville—		
Dalry-road	7	2
Shire of Keilor—		
Keilor	17	46
St. Albans	85	79
Tullamarine	18	6
Sydenham	5	13
Shire of Lilydale—		
Lilydale	98	109
Lilydale High School	112	152
Croydon	94	165
Mount Evelyn	91	76
Monbulk	65	87
Olinda	21	20
Wandin East	11	9
Wandin North	18	12
Wandin Yallock	58	43
Gruyere South	14	8
Silvan	34	36
Silvan South	29	15
Seville	43	51
St. Patrick's, Lilydale	124	93

SCHOOLS EXAMINED, 1951—*continued.*

	Number Examined.	
	Boys.	Girls.
Region of Port Phillip—*continued.*		
Shire of Melton—		
Melton	16	26
Melton South	14	14
Diggers Rest	16	13
Toolern Vale	4	12
Rockbank	14	10
Sydenham West	8	8
Shire of Mornington—		
Mornington	..	169
Our Lady's, Mornington	173	50
Shire of Upper Yarra—		
Gladysdale	15	16
Gilderoy	11	15
Hoddle's Creek	10	7
Launching Place	15	13
Powelltown	36	35
Wesburn	77	52
Yarra Junction	69	47
Woori Yallock	26	18
Shire of Werribee—		
Altona	134	147
Seaholme	20	23
Little River	23	17
Laverton	24	28
Point Cook	12	13
Duncan's-road	7	5
Truganina	3	8
Cocoroc	16	4
Cocoroc South	7	10
Diggers-road	26	17
Werribee	210	167
St. Andrew's, Werribee	28	12
St. Mary's, Altona	43	40
Region of East Gippsland—		
City of Sale—		
Sale	246	197
Sale Technical	215	94
Sale High School	79	66
St. Mary's, Sale	48	101
Shire of Avon—		
Airly	11	7
Cobain's Estate	22	13
Dargo	6	7
Munro	4	15
Perry Bridge	9	2
Stratford	51	59
Waterford	1	6
St. Patrick's, Stratford	14	14
Meerlieu	3	6
Shire of Bairnsdale—		
Bairnsdale	294	..
Bairnsdale Technical	196	..
Bairnsdale High School	68	..
Bengworden	10	5
Calulu	10	12
Bulumwaal	4	6
Eagle Point	15	15
Fernbank	10	8
Hillside	12	7
Lindenow South	21	18
Lindenow Flats	31	19
Lucknow	32	40
Flaggy Creek	7	5
Melwood	1	2
Mount Taylor	12	13
Hillside Central	10	14
Granite Rock	5	6
Woodglen	4	5
Wy Yung	24	10
Sarsfield	4	4
St. Mary's, Bairnsdale	89	100
Shire of Maffra—		
Boisdale Consolidated	77	112
Briagolong	30	26
Bundalaguah	13	4

SCHOOLS EXAMINED, 1951—*continued.*

	Number Examined.	
	Boys.	Girls.
Region of East Gippsland—*continued.*		
Shire of Maffra—*continued*:—		
Glenmaggie	9	5
Heyfield	15	12
Maffra	112	176
Myrtlebank	4	7
Riverslea	12	14
St. Joseph's, Maffra	..	169
Shire of Rosedale—		
Cowwarr	12	7
Glengarry	10	15
Glengarry West	14	9
Longford	17	10
Kilmany	12	10
Kilmany South	23	18
Nambrok West	15	10
Rosedale	32	25
Stradbroke	5	3
Toongabbie	9	5
Willung	13	6
Wurruk	8	5
Shire of Tambo—		
Nicholson	10	7
Region of Gippsland—		
Shire of Alberton—		
Prospect Estate	14	9
Shire of Berwick—		
Cockatoo	38	36
Dewhurst	6	2
Gembrook	40	50
Region of Glenelg—		
City of Hamilton—		
Hamilton	259	241
Hamilton High School	133	147
Shire of Ararat—		
Ararat	255	312
Ararat High School	172	155
Buangor	6	6
Elmhurst	22	27
Jackson's Creek	8	7
Lake Bolac	32	22
Maroona	14	12
Middle Creek	4	4
Mininera	10	4
Mininera East	8	1
Moyston	11	18
Pomonal	8	10
Ross Bridge	5	5
Tatyoon	9	5
Westmere	14	9
Willaura	51	52
Streatham	32	22
St. Mary's, Ararat	70	53
Shire of Minhamite—		
Macarthur	40	55
Broadwater	3	7
Shire of Mount Rouse—		
Chatsworth	7	4
Region of Goulburn—		
City of Shepparton—		
Shepparton	369	370
Shepparton, St. Brendan's	89	154
Shire of Rodney—		
Mooroopna	99	109
Region of Loddon—		
City of Bendigo—		
Gravel Hill	269	111
Camp Hill	186	11
St. Kilian's, Bendigo	395	..


METROPOLITAN MUNICIPALITIES
CHILDREN EXAMINED
1951
AREA COMPLETED
AREA PARTLY EXAMINED
PRESTON
3353
HEIDELBERG
CORURG
3558
NORTHCOTE
1858
ESSENDON
4298
BRUNSWICK
5363
976
COLLINGWOOD
6681
KEW
BRAYBROOK
422
MELBOURNE
4098
CAMBERWELL
BOX-HILL
825
FOOTSCRAY
5375
HAWTHORN
667
RICHMOND
PORT MELBOURNE
845
SOUTH MELBOURNE
PRAHRAN
WILLIAMSTOWN
2947
ST KILDA
MALVERN
CAULFIELD
895
OAKLEIGH
BRIGHTON
1210
PORT PHILLIP BAY
MOORABBIN
410
SANDRINGHAM
939
MORDIALLOC
1549
CHELSEA
1229

Defects in Men and Women Teachers Examined, 1st January to 31st December, 1951.

Number of teachers, Men* (1,095), Women (1,445).

Number of examinations, Men (1,298), Women (1,784).

Defects.	Number. Men.	Percentage.	Number. Women.	Percentage.
Rejected	68	6·2	(1) 38	2·6
Deferred	100	9·1	(2) 193	13·3
Hearing	52	4·7	14	·96
Vision—				
Defects notified ..	38	3·4	40	2·7
Wearing glasses ..	276	25·2	245	16·9
Teeth—				
Carious	62	5·6	64	4·4
Artificial dentures ..	357	32·6	277	19·1
Nose and Throat—				
Defects notified ..	3	·2	8	·5
Previous operation ..	413	37·7	651	45·0
General Health ..	78	7·1	67	4·6
Anaemia	1	·09	25	1·7
Thyroid	..	..	15	1·0
Diabetes	..	..	3	·2
Dysmenorrhoea ..	..	..	(3) 21	1·4
Hernia and varicose veins	90	8·4	3	·2
Appendicectomy ..	128	11·7	165	11·4
Physical deformity and postures	..	..	(4) 21	1·4
Other defects	110	10·0	97	6·7

* This includes 185 applicants for lost units of superannuation.

(1) *Rejected.*—Comprises those permanently ineligible for superannuation benefits (16).

Those refused on medical grounds for extra units of superannuation (17).

And those unsuitable for teaching (5).

(2) *Deferred.*—Included those whose superannuation was deferred :—

(*a*) Awaiting satisfactory treatment certificates from oculist, aurist, dentist, &c.

(*b*) Those requiring medical or surgical treatment.

(*c*) Those requiring a period of observation for adjustment to teaching and country work.

(*d*) Those requiring further observation and chest X-ray examination by the T.B. Bureau.

Also included are those considered unsuitable at the time of examination to commence teaching or enter Training College.

(3) *Menstrual.*—Only those requiring treatment and those under treatment are included.

(4) *Physical Deformities.*—Included those with definite deformities, and in some cases disabilities following poliomyelitis, those whose posture was very poor and for whom treatment was considered essential, and those with feet deformities causing inconvenience.

Sick Leave in Men and Women Teachers—1st January, 1951, to 31st December, 1951.

Number examined, Men (133), Women (201).

Number of consultations, Men (196), Women (252).

Defects.	Number. Men.	Percentage.	Number. Women.	Percentage.
Respiratory Disease—				
General	16	12·0	31	15·0
Tuberculosis	4	3·0	3	1·4
Circulatory disease ..	22	16·5	23	11·4
Gastro-intestinal	8	6·0	5	2·4
Mental diseases—				
Psychosis	4	3·0	13	6·4
Psychoneurosis ..	43	32·3	42	20·8
Malignant growths and tumours	2	1·5	9	4·4
Urinary diseases ..	2	1·5	8	4·0
Anaemia and general health	10	7·5	25	12·4
Gynaecological	..	..	10	5·0
Ear, nose, and throat ..	10	7·5	12	6·0
Eye	..	..	..	..
*Infectious diseases ..	5	3·7	6	3·0
Accidents	12	9·0	11	5·4
Thyroid diseases ..	1	0·7	4	2·0
Rheumatism and bone diseases	4	3·0	11	5·4
Skin	1	0·7	4	2·0
Diabetes	3	2·2	..	..
Operations—				
Appendix	5	3·7	8	4·0
Ear, nose, and throat ..	..	..	2	1·0
Gynaecological	..	..	19	9·4
Other	12	9·0	21	10·4
Superannuation—				
New cases	15	11·2	4	2·0
Re-examinations ..	9	6·7	22	10·9

* *Infectious Diseases.*—The following were on sick leave but were not examined by the School Medical Officer :—

	Men.	Women.
Morbilli	10	13
Rubella	6	30
Parotitis	55	98
Varicella	8	20
Scarlet Fever	1	4
Poliomyelitis	—	1

Men Teachers Examined—1st January, 1951, to 31st December, 1951.

Applicants for "Lost Units" of Superannuation.

Number of examinations, 189.

Number examined, 185.

Defects.	Number.	Percentage.
Rejected	33	17·8
Deferred	3	1·6
Hearing	10	5·4
Vision—		
Defects notified	3	1·6
Wearing glasses	81	43·7
Teeth—		
Carious	2	1·0
Artificial dentures	113	61·0
Nose and Throat—		
Defects notified	..	..
Previous operation	36	19·4
General health	17	9·1
Anaemia	1	·5
Thyroid	..	..
Hernia and varicose veins	25	13·5
Appendicectomy	31	16·7
Other defects	28	15·1

MARY LANE, M.B., B.S.,
Chief Medical Inspector of Schools.

REPORT OF THE DENTAL DIVISION, 1st JULY, 1951, TO 30th JUNE, 1952.

This year has been one of change and development, and has seen the establishment of the dental service as a separate division, the resumption of dental van service to country districts, and the purchase of a property to provide another dental centre in metropolitan area.

ORGANIZATION.

In August, 1951, a position was created for a Deputy Director of Child Health (Dental) who, under the Chief Health Officer, is responsible for the organization and administration of the dental service.

With the filling of this appointment in January, 1952, the School Dental Service, which had operated for about 30 years as a section of the School Medical Service, severed its long-standing link and is now established as a separate division.

The old title of Principal Dental Officer was abandoned, and replaced by the Superintendent, Central School Dental Centre, responsible for the operation of the enlarged dental centre in St. Kilda-road, Melbourne.

The activities of mobile units in country districts, and of dental officers engaged in treatment of orphanages and other institutions, are directed from the office of the division, which also controls the allocations of schools to be treated at dental centres in the metropolitan area.

Action has been initiated towards setting up a store at the old dental centre premises in City-road, South Melbourne, to hold stocks of dental and general stores for the division. The supply of working requirements to dental centres and mobile units will be simplified when the store is established, and bulk purchasing will result in considerable economy.

DENTAL CENTRES.

SUPERINTENDENT, MR. A. W. BUCHANAN, B.D.Sc., L.D.S.

Central School Dental Centre, Melbourne.

Dental treatment has been maintained throughout the year for the children attending schools based on this centre. As the dental vans came into operation, children from the districts served have been directed from the dental centre to treatment at their local schools. This will help to reduce the time interval between regular school visits to the centre and bring it nearer towards the proper annual routine.

There were 25,836 attendances and of these 16,573 children received full dental treatment at this centre during the year 1951–52.

The building provides markedly better conditions than were available at the old City-road premises, but a lot remains to be done to complete the conversion of a private home to a properly set-up dental centre, particularly regarding lighting, power, and plumbing for the surgeries.

The general anaesthetic room has been equipped with a nitrous oxide-oxygen machine, and resuscitation apparatus for emergencies. Anaesthetics are administered by a doctor from the School Medical Service, and the welfare of the patients is attended to by a nursing sister.

Dental Centre, North Fitzroy.

A property at 658 Nicholson-street, North Fitzroy, was purchased in February, 1952, to provide a dental centre for suburbs north of the city. It is having three rooms fitted up as surgeries, as the first stage of its development, and will be capable of further development to double this number.

The operation of this centre will enable the work of the dental service to be extended to additional schools in several suburbs in the locality.

Institutions.

Treatment of children in orphanages and other institutions has been continued, and 721 children received full treatment during the year. Much of this work was performed by a dental officer visiting institutions with portable equipment, and the balance by dental vans during the school vacation period.

Among the children treated were those attending the Yooralla Hospital School for Crippled Children. These include many spastics and other abnormalities. Children from Montague and Fitzroy Special Schools for sub-normal children were also treated. Regular dental care is very important for these groups, and, because of their disabilities, the children require very careful handling, and a high degree of patience on the part of the operator.

MOBILE UNITS.

OFFICER IN CHARGE: MR. D. J. A. WEBB, B.D.Sc., L.D.S.

Dental Vans.

Orders were placed, during 1951, for the reconditioning of the three older dental vans, and for the construction of three new vans, on 2-ton Bedford chassis. The new vans were fitted with modern electrical equipment, for use at schools where electric power was available.

The first of the reconditioned vans became available in September, 1951, and the remaining two, together with the three new vans during the period, March to June, 1952.

The vans, when ready, were progressively placed in country districts to resume work at schools which had formerly been visited regularly, but had lapsed owing to lack of staff.

Progress along the country itineraries, was very slow in some districts for two main reasons:—

(1) Large increases in population, notably Gippsland.

(2) Accumulation of work in districts which had not received a visit from school dental officers for some years.

It is of great satisfaction to note that the acceptance rate for treatment by parents has been very high. In most cases it has been about 80–85 per cent., and in many more remote schools, the rate has risen to 100 per cent.

Country districts which received visits from mobile Dental Units were the Goulburn Valley, Mallee, Gippsland, and Dandenong Ranges. During the year these mobile units visited 74 schools and afforded treatment to 2,503 children.

This number will be considerably increased in the ensuing twelve months as the six dental vans will be in full operation for the whole year.

Semi-trailer Units.

Orders were placed for the construction of six semi-trailer units, fitted with two surgeries and X-ray equipment. There will be two dental officers attached to each of these units, the first of which is rapidly nearing completion.

These semi-trailer units will be used in the larger country towns and schools with attendances of 300 or more.

Staff.

Nine additional dental officers were appointed during the year, bringing the strength to 22—19 males, 3 females. Permanent officers, including six made permanent during the year, number 15—temporary 7. Dental attendants increased from 13 to 21.

The resumption of dental van work has reintroduced the rotation of staff between country itineraries and duty in the metropolitan area, the change from city to country work, and vice versa, being made at the beginning of each school term.

Pre-school Children.

A grant of £3,500 was made available to the Dental Hospital of Melbourne for the purpose of extending its activities in the treatment of children of pre-school age in the inner metropolitan area.

This subsidy has enabled staff to be provided for the Pre-school Dental Clinic at the Infant Welfare Centre in South Melbourne, and has contributed to the cost of running the hospital's dental caravan in the treatment of young children at kindergartens and homes in several municipalities.

General.

A start has been made on the expansion of the dental service, to extend its activities over a wider range, and make regular dental treatment available to a greater number of children in both country and metropolitan areas.

Of equal importance to the health of the community, and the children in particular, are educational and preventive measures to reduce the incidence of dental caries, and orthodontic service to prevent and correct abnormalities in the development of the dentition. It is hoped to develop these aspects over succeeding years.

Statistics for the calendar year, 1951, are attached.

N. H. ANDREWS, D.D.Sc., L.D.S.,
Deputy Director of Child Health (Dental).

DENTAL TREATMENT PERFORMED, JANUARY–DECEMBER, 1951.

—	Number of Children.	Number of Attendances.	Deciduous Teeth.		Permanent Teeth.		General Anaesthetics.	Dressings Temporary Fillings.	Regulations.	Other Operations.
			Extractions.	Fillings.	Extractions.	Fillings.				
Metropolitan—										
Central School Dental Centre ..	14,782	21,394	10,576	3,886	3,426	17,116	307	2,038	883	4,790
Institutions	73	290	92	75	24	192	..	129	..	139
Country—										
Goulburn Valley	641	795	921	142	122	507	1	31	..	201
Total	15,496	22,479	11,589	4,103	3,572	17,815	308	2,198	883	5,130

REPORT OF THE INDUSTRIAL HYGIENE DIVISION, JULY 1st, 1951, TO JUNE 30th, 1952.

STAFF.

The staff during the whole or part of the period 1st July, 1951, to 30th June, 1952, consisted of :—

Chief Industrial Hygiene Officer	Dr. D. O. Shiels
Medical Officer, Industrial Hygiene	Dr. A. Christophers
Assistant Medical Officer (Temporary)	Dr. S. B. Sutton*
Scientific Officer (Chemist)	C. Thomas, M.Sc.†
,, ,, ,,	G. Palmer, B.Sc.
,, ,, (Female)	P. Cornish, B.Sc.‡
Scientific Officer (Chemist) (Temp.)	E. J. Kearley, B.Sc.‡
Industrial Health Inspector	R. G. Boyle§
,, ,, ,,	F. N. Hutchison§
,, ,, ,,	W. J. Shaw§
,, ,, ,,	J. A. Wyss§
Laboratory Technician	Mrs. Vanden Berg
Typist and Filing Clerk	Miss Morganti
,, ,, ,,	Mrs. Szabo

* Resigned as from 1st April, 1952.
† On leave for medical course.
‡ From 3rd March, 1952.
§ Royal Sanitary Institute Certificate.

WORK OF THE DIVISION.

The following table shows the number of inspections and tests carried out in regard to various harmful agents during the year 1st January, 1951, to 31st December, 1951.

INSPECTIONS AND TESTS—JANUARY TO DECEMBER, 1951.

Hazard.	Inspections.		Tests.	
Dusts—				
Asbestos	8		22	
Lead	207		78	
Silica	43		86	
Other inorganic	14		16	
Organic	87		65	
Mixed	111		22	
	470	470	289	289
Fumes—				
Chromic acid	22	22	7	7
Gases—				
Carbon monoxide	5		11	
Cyanide	9		3	
Oxides of nitrogen	5		3	
Sulphuretted hydrogen	1		4	
Sulphur dioxide	3		..	
Other gases	4		..	
	27	27	21	21
Vapour—				
Benzene	301		128	
Aromatic	284		20	
Trichlorethylene	3		5	
Miscellaneous vapours	8		..	
	596	596	153	153
Spray—				
Paint, lacquer, varnish, enamel	70	70	1	1
Radioactive—				
U.V., I.R., R.A. paint	120		..	
No hazard	111		..	
Undetermined and Miscellaneous	33		..	
Contact—				
Skin irritants, &c.	18			
	1,467		471	

WORK OF THE LABORATORY.

The work of the Industrial Hygiene Laboratory included examinations of samples secured by the inspectorial staff for analysis, for dust counts and in connection with investigations of conditions of work ; various tests done in connection with the examination of individuals in various industries and investigations in connection with improvement in analytical and testing methods.

The following table shows the amount of work done :—

Blood Examinations—			
Stippled cell counts	995		
Determination of ratio of monocytes + large lymphocytes to small lymphocytes	269		
Red cell counts	83		
White cell counts	77		
Determinations of mean corpuscular Haemoglobin	82		
Determination of percentage of Haemoglobin	86		
Differential white cell counts	128		
	1,720		
		1,720	
Dust Counts	117		
		117	
Chemical Work—			
Determination of lead in urine	313		
,, ,, ,, blood	13		
,, ,, ,, faeces	16		
,, ,, ,, organs	4		
,, ,, ,, air	81		
,, ,, ,, food	3		
Determination of porphyrin in urine	184		
Determination of ratio of inorganic to organic sulphates in urine	2		
Determination of stercobilin in faeces	4		
Determination of trichlorethylene in air	5		
	625		
		625	
Total		2,462	

In addition to the above the Health Department Analysts at the State Laboratories carried out 31 analyses for the Industrial Hygiene Division for free silica in dusts, benzene in solvents, adhesives, &c.

OCCUPATIONAL DISEASES.

The following is a list of occupational diseases reported to the Department during the year or found as a result of investigations by the Division :—

Lead poisoning	64
Silicosis	101*
Silicosis with tuberculosis	5
Carbon monoxide poisoning	1
Asbestosis	1
Poisoning by oxides of nitrogen	14
	186

* These cases were those reported as having X-ray findings indicating silicosis. They were not all disabled from work.

LEAD TRADES.

Under the "Dangerous Trades (Medical Examination) Regulations 1947", 2,270 reports concerning 888 different individuals employed in 96 factories were received. There were 64 cases of lead poisoning reported during the year, the majority of these being from accumulator factories, and most of them being not of a severe nature.

The conditions as to atmospheric contamination by lead have greatly improved in some factories, but in others have deteriorated. This Division co-operates with managements in the endeavour to improve these conditions. Constant surveillance is necessary in order to keep dust prevention methods functioning efficiently. The type of labour available has in many cases made the maintenance of hygienic discipline difficult.

The experience of this Division in the last few years has indicated that certain trades in which processes involving exposure to lead hazards exist and which are not at present included in the list of those in which compulsory periodical medical examinations is required, should be so included.

It is therefore proposed to recommend to the appropriate authorities the extension of the Schedule to the above Regulations, to include such trades.

The following table summarizes the results of the periodical medical examinations in those occupations coming within the Regulations.

PERIODICAL MEDICAL EXAMINATIONS OF WORKERS IN CERTAIN LEAD OCCUPATIONS—JANUARY TO DECEMBER, 1951.

Industry or Trade Process.	Number of Factories or Works.	Total Number of Individuals Examined.	Total Number of Medical Examinations Carried Out.	Total Number of Individuals Notified as Lead-poisoned.
Compounds of lead, manufacturers of ..	4	70	304	21
Smelting	5	19	66	..
Accumulators, manufacturers	29	271	1,036	37
Paints containing lead, manufacturers ..	26	176	211	..
Spray painting, lead compounds ..	3	33	37	..
Lead arsenate, manufacturers of	3	7	31	4
Pottery, glazing ..	2	1	1	..
Rubber works ..	3	2	5	..
Vitreous enamelling ..	1	29	46	..
Lead wiping, grinding, buffing	9	221	314	..
Tetraethyl lead pethol	4	19	27	..
Miscellaneous lead ..	7	40	192	2 (solder mfr.)
	96	888	2,270	64

LEGISLATION.

The "X-ray Fluoroscopy (Shoe-fitting) Regulations 1951" were gazetted on September 19, 1951, Victorian *Government Gazette* No. 970.

The Interdepartmental Committee on the newer fungicides held a number of further meetings. Regulations in regard to the manufacture and Regulations in regard to the use of these substances drafted by the Committee were submitted to the Health Commission and with slight modifications are to be submitted to the Crown Law Department for consideration.

RESEARCH.

Work on the following items has been continued :—

(1) The effect of intravenous injections of sodium thio-sulphate in the faecal and urinary excretion of lead in cases of lead poisoning.

(2) The effect of sodium citrate and of ammonium citrate in the urinary excretion of lead in a person not exposed to any lead hazard.

(3) The investigation of the porphyrin content of the urine of persons exposed to lead hazards is being continued.

(4) Investigation of cases of lead poisoning in children and the circumstances which caused them.

(5) An investigation into improved methods for differential counts of white blood cells has been done.

(6) Investigations have been continued into improved methods for analysis of lead in blood and urine.

(7) Determinations of lead in stomach contents and tissues of a calf suspected of suffering from lead poisoning have been done for the Veterinary Research Institute. The results were significant of lead poisoning.

Special Field Investigations.

(1) A great deal of preliminary organizing work in regard to the x-ray survey of employees in dusty trades has been done. Union officials, employers, and employees have co-operated well in this work.

(2) A survey of the pottery industry has been commenced.

(3) A survey of the dust conditions in flock mills was carried out.

EXAMINATION OF INDIVIDUALS.

The number of different individuals examined personally by this Division in connection with occupational diseases was 150.

PUBLICATIONS.

Only one paper was published during this period, "The Treatment of Lead Poisoning by the Intravenous Injection of Sodium Thiosulphate", Australian Medical Journal 1952.

The data for a number of others have been accumulated and five partly written up for publication.

COMMITTEES.

In addition to that already mentioned the Chief Industrial Hygiene Officer has attended meetings of the following committees :—

(1) Committee on Industrial Hygiene of the National Health and Medical Research Council.

(2) Committee of the Standards Association dealing with Eye Protection in Industry, and with Protective Clothing.

(3) Poisons Schedule Advisory Panel of the Pharmacy Board.

(4) Committee appointed by Minister of Mines to examine the Health and Safety Provisions of the Mines Act. The bodies represented being the Mines Department, the Australian Institute of Mining and Metallurgy, the Chamber of Mines, Victoria ; the Australian Workers' Union and the Department of Health.

CARBON MONOXIDE.

Diesel Engines.

In a city clothing factory a diesel engine was installed as an auxiliary power unit, and the exhaust discharged under the floor. The exhaust gases and fumes returned through floor ventilators into the workroom. Concentrations up to 500 parts per million were found.

Some of the work people were affected to a moderate extent.

In another large factory, a man was overcome in the testing room by exhaust gas from Diesel engines. The exhaust discharged into the testing room. Analysis of the Diesel-engine exhaust showed 250 parts per million some short distance away from the exhaust opening. When the man was overcome three Diesels were running on the testing benches and all exhausted direct into the room.

These occurrences provide further evidence that the very commonly held opinion that Carbon Monoxide is present only in negligible amounts in the exhaust gases for Diesel engines is quite erroneous. On occasions, dangerous concentrations may be produced.

OXIDES OF NITROGEN.

Fourteen firemen of the Melbourne Harbour Trust and the Metropolitan Fire Brigades Board were affected by the gases from a burning cargo of Sodium Nitrate on board a ship. One man was so severely affected that his life was despaired of on several occasions but he eventually recovered. The others were not so severely affected, but complained of dyspnoea, headache, vomiting, &c.

A comprehensive report on this occurrence will probably be published in the near future.

PROSECUTIONS.

One accumulator manufacturer was prosecuted for breach of the Dangerous Trades (Medical Examination) Regulations 1947, and fined £10.

LECTURES.

The following lectures were given by the Chief Industrial Hygiene Officer :—

Two lectures on Industrial Hygiene to a course for nurses conducted by the College of Nursing.

Three lectures on Occupational Diseases to a class doing a course in Safety organized by the Melbourne Technical College for Managers, Safety Officers, &c.

A lecture on some aspects of Occupational Diseases to fifth and sixth-year medical students at the University of Melbourne.

A course of approximately twenty lectures on Industrial Hygiene to the Scientific and Inspectorial Staff of the Division.

D. O. SHIELS, D.Sc., Ph.D., F.R.I.C., F.A.C.I., M.D., B.S.,
Chief Industrial Hygiene Officer.

REPORT OF THE ENGINEERING DIVISION, 1951–52.

STAFF.

The staff inereased in numbers by one during the year to fifteen, but there was considerable change in personnel. An appointment of a temporary building surveyor brought staff of this partieular office to the establishment figure of four. However, early in 1951, a permanent building surveyor resigned, and so a vacancy for a building surveyor exists. Another resignation was that of the assistant draftswoman, but in this ease it was not long before the vaeancy was filled. In addition, the outstanding vaeaney of building inspeetor (eleetrical), occasioned by a retirement in 1950, was also filled. The final result is that the staff is short by two engineers and one building surveyor. It is expeeted that one of these three vacaneies will be filled at an early date.

SEWERAGE AND SEWAGE DISPOSAL.

Two preliminary plans with reports for new provisional sewerage systems were examined up to the 31st December, 1951, and two others up to the 30th June, 1952. Inspections were made of proposed treatment work sites for sewerage systems at Morwell, Inglewood, Cobram, Rutherglen, and Korumburra.

The quarterly inspections of the treatment works have not yet been resumed because of shortage of staff, but it is hoped that these will be revived at an early date.

No new works are in operation. The eonstruetion of the Moe system is proeeeding slowly but surely, and it is expeeted that it will be in operation in eighteen months. A visit has not yet been made to Maffra, where house connections numbered only twelve in the past year. Total house connections here now number 164 and a visit with sampling will shortly be made.

An interesting development is proposed at Ballarat, where for some years dumping of nightsoil into one digestion tank at the treatment works has been proceeding with exeellent results. It was the intention to provide aeeess to the remainder of the tanks and extend the dumping to these, thus aeeepting all nightsoil for whieh the Sewerage Authority was responsible and enabling the closing of the existing depot whieh is a eonstant source of trouble. The provision of the aeeess road is now eonsidered to present great difficulty, and it is therefore proposed that a pan-dumping point be ereeted near the treatment works and nightsoil be run to the sewer outfall flume just above the treatment works. Dilution sewage to nightsoil will be of the order of 500 to 1, and it is thought that the effect on the treatment works will be negligible. Ballarat has a sewered population of about 36,000; 2,000 pans will be dumped eaeh week.

It is interesting to note that for some years at Mornington pan-dumping into a sewer some 3 miles from the munieipal sewerage-treatment works has been carried on. In this ease 590 pans are dumped eaeh week over three days. The sewered population is about 1,600 persons and the dilution sewage to nightsoil is only in the region of 60 to 1. There has been no visual deterioration in the treatment works units and the quality of the effluent has declined very slightly.

The Fourteenth Annual Conferenee of Sewerage Engineers and Operators was held on 30th September, 1951, in the Board Room of the M.M.B.W. There was an excellent attendanee. The eonference was opened by the Minister of Water Supply, the Hon. R. K. Brose, M.L.A. Papers and discussion were up to the usual high standard. A most interesting afternoon was spent with an inspeetion of the M.M.B.W. laboratory at South Melbourne.

SEPTIC TANK SYSTEMS.

The number of plans examined in the claendar year was 20 per eent. in exeess of those examined in the preeeding year, and requests for advice from the staff on installations for which approval was not required were again particularly numerous. The distribution of the recommended design for household installation was very large.

Four eountry towns were investigated for septic tank installations under the *Local Government (Septic Tanks) Acts* 1938. In one of these the installation of standard septic tanks was recommended, in two, beeause of water supply and effluent disposal diffieulties, the council was reeommended to install septie elosets, and in the remaining township a mixed system of standard septie tanks and septie elosets was recommended.

An amendment of the Health Aet to give the Commission control of septie-tank installations in publie buildings is still awaited.

STREAM POLLUTION AND DISPOSAL OF TRADE WASTE.

No further aetion has been taken in the matter of the pollution of the Latrobe river since the passing of legislation for the formation of the Latrobe Valley Drainage Commission, whieh will eontrol the drainage of the valley and the authorization of the construction of a pipeline to carry certain wastes from the area to the sea.

Work is still proeeeding at Ballarat on the diversion of several trade wastes from the Yarrowee Creek to the sewerage system. It is expeeted that the first of these, namely the waste from Myer Woollen Mills, will be eonnected at an early date.

As a result of the investigation eonducted last year into the pollution of the Dandenong Creek, correetive measures were required in several septic tank installations, and these have been taken.

HOSPITALS AND BENEVOLENT INSTITUTIONS.

The number of plans examined was well below the level of the preceding year. This was occasioned by the loss of control by the Department of private hospitals, whieh were taken over by the Hospitals and Charities Commission. Hospital eonstruction has proceeded very slowly in many centres throughout the State.

Works eompleted in the financial year were :—

- The Nursing Aid School Melbourne.
- Apollo Bay District Hospital.
- Royal Melbourne Hospital, Maids' Hostel.
- Mildura District Hospital Nurses' Dining Room.
- Alfred Hospital, Renovation of Theatre Block.
- Ballarat District Hospital Nurses' Home.
- Children's Hospital Frankston, Sick Nurses' Bay.
- Gippsland Hospital Sale, Nurses' Home.
- Frankston Hospital, Nurses' Home.

Works nearly completed are :—

- Children's Hospital Carlton, New Theatre—80 per eent.
- Yallourn Hospital, Additions—92 per cent.
- Frankston Children's Hospital, Administration Bloek—75 per cent.
- Queen Vietoria Hospital, Alterations to Bloeks D and I—95 per eent.

Royal Melbourne Hospital, Research Building—95 per cent.
Rochester and District Hospital—90 per cent.
South Gippsland Hospital, Foster—90 per cent.
Mildura Hospital, Nurses' Home—92 per cent.
Castlemaine Hospital, Nurses' Hospital Extensions—93 per cent.
Mordialloc and Cheltenham Hospital—88 per cent.
Warragul District Hospital, Boiler House and Laundry—76 per cent.
Prince Henry Hospital, Workshops—95 per cent.; Nurses Home—95 per cent.; Coal Bunkers—95 per cent.; North Wing—98 per cent.
Austin Hospital, Heidelberg, Children's Ward—98 per cent.; Boiler House—91 per cent.
Bairnsdale Hospital, Nurses' Home, Extensions—95 per cent.
Bendigo Midwifery Wing—94 per cent.
Colac Nurses' Home, Extensions—90 per cent.
Dandenong District Hospital, Alterations—90 per cent.
Numurkah War Memorial Nurses Hospital—95 per cent.
Wimmera Base Hospital, Additions—97 per cent.

ABATTOIRS AND OFFENSIVE TRADES.

The number of plans examined is still very low, being the same as for the preceding year.

Plans have not yet been lodged for any works at Melbourne, Richmond or South Melbourne municipal abbatoirs, on which Cabinet embargo was lifted some time ago. In regard to the South Melbourne abattoir, the council has recently called for tenders for lease of the abattoir. Work was completed here during the year of the Dry Rendering Plant which is now in operation. The municipal abattoirs at Castlemaine were completed and are giving entire satisfaction. Nothing further has been heard of the abattoirs proposed at Kyneton, for which plans were approved some years ago, nor of municipal abbattoirs at other country centres which had been considered.

A large section of a new private abattoir was opened in Brooklyn, the major portion of the firm's sheep killing having been transferred from the South Melbourne abattoirs.

PUBLIC BUILDINGS.

The number of plans for public buildings examined during the calendar year was 706, being 25 per cent. in excess of those for the previous year. This number was largely made up of churches and Sunday schools, and more particularly of pre-school centres which were more than doubled, increasing from 83 to 169.

The Building Regulations as amended have been reviewed by the Crown Solicitor and would normally have been forwarded for gazetting. However, one complete part, namely, Part 6: Employment of Firemen, has been the subject of considerable discussion, and it is not proposed to have the regulations gazetted until a review of this subject has been finalized.

Towards the end of the previous year it was decided to allot a building inspector to each health area of the State. It is hoped that this system will provide more efficient inspection and greater economy in operation.

No further action has been taken to amend the School Regulations. The report of the Victorian committee investigating the natural lighting of schools has not yet been submitted to the Commission, and until this is done no action can be taken. It is hoped to receive this report before long.

10463/52.—5

Early in the year the Commission requested a survey of the conditions at Foreshore Amusement Structures and later resolved that regulations be prepared to deal with them. Such structures are public buildings and there are no clauses in the Building Regulations dealing with them. The proposed regulations are now being prepared.

BOARDS AND COMMITTEES.

The Chief Engineer is a member of the Building Regulations Committee, and a Referee under the Local Government Act.

He attended 32 meetings of the Building Regulations Committee, and 20 meetings of the Referees. He also attended all the meetings of the Victorian committee investigating the natural lighting of schools, of which he is a member.

Mr. C. E. B. Waldron, M.Sc., Senior Building Surveyor, replaced the late Mr. Hepburn as a member of the Municipal Building Surveyors' Board, and attended four meetings. Mr. Waldron continued as Chairman of the Plumbers and Gasfitters Board, and his report is appended.

Mr. C. Cross, ex-electrical inspector of the Branch, continues as a member of the Cinematograph Operators Board.

J. F. McDONNELL, B.C.E., A.M.I.E.A.,
Chief Engineer.

Plans Examined.

Class of Building.	New Buildings.	Alteration or Addition.	Total.
Theatres	..	4	4
Picture Theatres	5	22	27
Dance Halls	6	4	10
Public Halls, Churches, Sunday Schools	132	148	280
Day Schools	25	53	78
Pre-school and Infant Welfare Centres	151	18	169
Public Hospitals	7	76	83
Infectious Diseases Hospitals ..	1	2	3
Benevolent, Babies', and Other Institutions	15	8	23
Entertainment Parks, Travelling Shows, Sports Arenas ..	1	2	3
Other Public Buildings ..	8	18	26
Total Public Buildings ..	351	355	706
Offensive Trades Premises ..	5	9	14
Total Buildings	356	364	720
Public Sewerage Systems ..	4	2	6
Septic Tank Systems	87	..	87
Total Plans Examined ..	447	366	813

Inspections.

Day Inspections.

Building and Electrical Inspections ..	4,051
Tests of Mechanical Ventilation Systems ..	29
Offensive Trade Premises	27
Septic Tank Systems	100
Factory Drainage Disposal Systems.. ..	14
Public Sewerage Systems	30
Inspections on Behalf of Hospital and Charities Commission	25

Night Inspections.

Enforcement of Regulations	2,226
Collection of Air Samples	17
Total Inspections	6,519

Special Technical Investigations.

By C. P. Morrish, 1951–52.

Date.	District.	Matter Investigated.	Outcome.
Oct.–Dec.	.. .. ..	Accidents in Amusement Parks and Survey of Foreshores	Preparation of Regulations
17.5.51	Sea Lake ..	Drainage Problems	Sedimentation of Sullage and representations to Education Department to resite new school
June–Dec.	Watchem ..	Mass Septic Tanks	Contract let for S.T's. and 70 per cent. constructed
14.11.51	Goorambat ..	.. ..	Still under discussion
14.11.51	Devenish	.. ..	
15.11.51	Glenrowan ..	.. ..	
15.11.51	Baddaginnie ..	.. ..	
6.12.51	Frankston ..	Septic Tank Failures	Cl. appointed new Authorized Officer for S.T's.
30.11.51	Kerang	Lake, Secondary Putrefaction	S.A. investigating rehabilitation of S.A.T.W.
June–Dec.	.. .. ..	Fire-testing of Wallboard Linings	Standard Test now departmental procedure
Nov.–Dec.	.. .. ..	Preparation for Royal Ball	Cancelled
20.6.51	.. .. ..	Nunawading Drainage Complaints ..	Cl. undertook to revise subdivisional policy
14.2.51	.. .. ..	Maryvale Paper Mills Discharge	Will be accepted by Latrobe Valley Drainage Commission
14.2.51	.. .. ..	Morwell Housing Estate Drainage Nuisance ..	Housing Commission corrected matters
15.4.51	.. .. ..	Polution of Toomuc Creek	Corrected
20.4.51	.. .. ..	Pollution of Dandenong Creek	Partially improved
22.6.51	.. .. ..	Pollution by Brick Mills, Wangaratta ..	Still continuing
27.6.51	.. .. ..	Pollution of Albert River, Yarram ..	Some improvement
June–Dec.	.. .. ..	Pollution of Yarrowee Creek, Ballarat ..	Prosecution of Woollen Mills ordered, and other premises constructing plants
July–Dec.	.. .. ..	Pollution by V.I.M.A., Ballarat	Plant about to be constructed
18.9.51	.. .. ..	Pollution by Camm's Factory, Monbulk ..	Some improvement
December	.. .. ..	Pollution of Goulburn River by Eildon Sewage Treatment Plant	Some improvement but still in hand
14.10.51	.. .. ..	Yea Cemetery Drainage	Diversion drain constructed
20.11.51	.. .. ..	Nightsoil disposal, Bairnsdale	Proposal to use sewer in abeyance
3.5.51	Brunswick ..	Albi-R Paint, Demonstration for fire resistance	Approved by Commission
7.5.51	Portland ..	Conference *re* Borthwick's Sewerage Proposal	None
7.8.51	Box Hill ..	Proposed Cemetery, Golf Links Site ..	Approval recommended
12.9.51	Richmond ..	Kosher-killing Crush	Approval recommended
15.11.51	Brunswick ..	Nuisance from egg shells from Egg Board Depot	No nuisance found—Cl. advised

REPORT OF PLUMBERS' AND GASFITTERS' BOARD, 1951.

The Board held four ordinary and two special meetings.

The Board's finances are approaching bankruptcy due to rising costs, the employment of a full-time inspector without financial assistance from the Department of Health, and the failure of successive Governments to implement essential amendments to the Health Act to increase the scale of fees for applications, renewal of registrations, and examination beyond the limits set out in the *Health Act* 1933.

Other amendments to the Act, to revise the definition of a plumber's labourer and to make employee and employer responsible for faulty work or materials, have also not received Cabinet consideration.

The Board has agreed, subject to minor amendments, to sign an Agreement on Interstate Reciprocity of Certificates of Competency as a Plumber, Water Plumber, Drainer, &c., but all contracting parties have not yet signified their agreement. It is anticipated that this Agreement will be adopted this year. This reciprocity will be of the greatest assistance to employers and employees.

Four examinations were held during the year and Mr. Dean was appointed co-examiner. With few exceptions those examined showed little trade ability. Examinations are of the greatest assistance in ascertaining the trade ability of non-English-speaking migrants. The scope of the examinations remains as before, but a three-hour Theory and a nine-hour Practical examination have replaced the former six-hour Practical Test.

Mr. R. G. Stranks has replaced Mr. G. S. Serpell (resigned) as the representative of the Education Department and has shown zeal and ability.

The number of names in the register at 31st December, 1951, was 3,364. The number of applicants approved was 423 and of applicants registered 310.

Income was £977 and the expenditure is being adjusted with the Health Department.

Mr. G. J. Dean has carried out his duties as Inspector with firmness and tact and to the entire satisfaction of the Board.

Mr. F. Vine as Registrar, although handicapped by ill-health has carried out his duties efficiently. He has been in receipt of clerical assistance.

Mr. Dean has not had time to visit provincial and country centres as often as is considered necessary, and the employment of a second inspector is desired.

The increased activities of the Board, especially with its dealings with migrants have added to my duties which have occupied 25 days of my time.

C. E. B. WALDRON, M.Sc.,
Chairman.

REPORT OF VENEREAL DISEASES DIVISION FOR YEAR ENDING 30th JUNE, 1952.

STATISTICS AND COMMENTS.

(The Statistics relating to State-wide incidence are for the calendar year 1951 and, for the sake of uniformity, clinic figures are given for the same period.)

The table below shows the reported incidence of gonorrhoea and acquired syphilis in Victoria for the years 1948–1951.

Year.	Gonorrhoea.		Syphilis.	
	Male.	Female.	Male.	Female.
1948	1,533	199	270	119
1949	966	188	272	89
1950	920	96	309	130
1951	650	68	190	91

(In the above figures cases of dual infections are included in both totals.)

It is pleasing to note that the figures under all headings are substantially lower in 1951 than in the previous year.

The rise in the incidence of syphilis in 1950 has been countered by a fall to below the 1949 level as regards males and only two (2) above it in the case of females.

A table showing a detailed analysis of the State-wide notifications appears at the end of this Report.

GOVERNMENT CLINIC, MELBOURNE.

(*a*) Male Section.

The total number of patients reporting during the year was 1,749—a reduction of 319 compared with the previous year. This is in keeping with the State-wide falling off in reported cases.

A detailed table of the conditions treated at the Male Clinic appears at the end of this Report.

The prophylactic centre gave a total of 6,762 toilets. The highest monthly total was 674 in March and the lowest 438 in October. During the latter month the hours during which the Centre was open were temporarily curtailed owing to staff shortage.

As far as is known no patient developed a venereal infection acquired at an exposure for which prophylaxis was given.

(*b*) Female Section.

During 1950, 303 patients reported to the Female Clinic, an increase of 49 on the figures for the previous year. The number in each diagnosis category, compared with the figures for the previous year are set out hereunder :—

—	1950.	1951.
Gonorrhoea	22	24
Syphilis	27	32
Cervicitis (non-gonorrhoeal)	13	24
Non-venereal conditions and "Nothing abnormal detected"	131	128
Examinations for U.S.A. Passport Visas ..	59	96
	252	304

(The difference between the number reporting and the column total is due to one patient having gonorrhoea and syphilis.)

GEELONG CLINIC.

A total of 45 patients reported to the Geelong Clinic during the year. The classified diagnosis are hereunder :—

—	Males.	Females.
Gonorrhoea	9	1
Urethritis	19	1
Syphilis	12	2
Soft Sore	1	..
	41	4

In addition two seamen received treatment for syphilis on "International Cards".

LOCALITY INCIDENCE OF VENEREAL DISEASE.

A glance at the State Statistics for 1951 indicates that only two cases were reported outside the Metropolitan Area and the Cities of Bendigo and Geelong. In the latter City all the cases were reported from the Government Clinic.

Clinic experience indicates that a few country dwellers who have or suspect venereal disease seek treatment in Melbourne. Notwithstanding this only two conclusions can be drawn—either venereal disease is practically non-existent in rural Victoria or cases are not being reported.

TREATMENT.

On 1st January, 1952, the treatment of syphilis by penicillin alone became standard at the Government Clinic, Melbourne, only patients sensitive to this remedy being treated by other methods. The results so far have been very pleasing.

A medical officer has visited Winlaton usually once a week. In this quiet locality it is very noticeable that the patients are far less disturbed by external influences than was the case at Fairhaven.

C. G. B. COLQUHOUN.

STATE VENEREAL DISEASE STATISTICS FOR 1951.

Area.	Gonorrhoea.		Acquired Syphilis.		Congenital Syphilis.		Gonorrhoea and Syphilis.		Soft Sore.		Gonorrhoea and Soft Sore.		Syphilis and Soft Sore.		Gonorrhoea Syphilis, and Soft Sore.		Total Notifications.		Total Infections.		Grand Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
Metropolitan ..	432	42	73	57	..	2	2	..	..	..	..	..	..	..	..	..	507	101	509	101	610
Clinics—																					
Melbourne ..	193	23	91	31	5	..	12	1	32	..	1	..	..	..	..	..	334	55	347	56	403
Geelong ..	9	1	11	2	1	..	..	..	1	..	..	..	..	..	..	..	22	3	22	3	25
Ballarat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bendigo	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	2
Rest of State ..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	..	2
Whole State ..	636	67	176	90	6	2	14	1	33	..	1	..	..	..	..	..	866	160	881	161	1,042

MALE CLINIC MELBOURNE, 1951.

Month.	Gonorrhoea.	Soft Sore.	Primary Syphilis.	Secondary Syphilis.	Tertiary Syphilis.	Congenital Syphilis.	Latent Syphilis.	Gonorrhoea. and Soft Sore.	Gonorrhoea and Syphilis.	Urethritis and Syphilis.	Total V.D.	Other Conditions.	N.G.U.	N.A.D.	N.Y.D.	Total.
January ..	27	5	2	2	..	..	..	..	1	..	37	23	69	65	..	194
February ..	17	5	5	2	..	2	..	..	1	..	32	10	55	61	..	158
March ..	26	1	7	..	..	1	..	..	3	..	38	13	39	62	1	153
April ..	14	9	5	5	..	1	..	..	1	..	35	17	35	55	..	142
May ..	16	2	5	2	1	1	..	..	3	..	30	18	38	66	..	152
June ..	18	1	2	9	2	1	..	..	1	..	34	20	30	63	..	147
July ..	12	2	2	2	..	..	..	..	..	..	18	9	35	68	..	130
August ..	13	4	2	..	..	..	..	..	..	..	19	27	41	46	..	133
September ..	14	2	1	4	1	..	..	..	..	..	22	19	27	53	..	121
October ..	13	1	1	9	1	..	..	..	..	..	25	25	41	72	..	163
November ..	13	..	..	8	1	..	..	..	2	1	25	36	43	65	..	169
December ..	10	..	5	4	..	..	..	..	..	..	19	15	30	23	..	87
	193	32	37	47	6	6	..	..	12	1	334	232	483	699	1	1,749

Of the 699 patients classified as N.A.D. (nothing abnormal detected), 84 were examinations in connexion with U.S.A. Passport Visas.

REPORT OF THE MEDICAL SUPERVISOR FOR POLIOMYELITIS FOR THE YEAR ENDING 30TH JUNE, 1952.

The incidence of poliomyelitis during 1951, in Victoria, was high, exceeding that recorded in the epidemic years of 1931, 1934, 1946-47, and being exceeded only by that during the 1937–38 and 1949 epidemics.

The occurrence of three consecutive years of relatively high poliomyelitis incidence (1949–50–51) has made poliomyelitis the most important infectious disease in Victoria. This is similar to experience overseas and in the other States of Australia—particularly the adjoining State of South Australia where the incidence of poliomyelitis during the past few years has been approximately three times that in Victoria.

The maximal incidence of poliomyelitis during 1951 occurred in August, the incidence was highest in the 0–10-year age group in the extra-metropolitan area, in the cities, towns, and boroughs. It was approximately equal in both sexes, and detailed analysis of the incidence is given in the accompanying graphs.

Part of the increased incidence of poliomyelitis in recent years, may be due to improved diagnosis and reporting, but this cannot explain the total increase.

The epidemiological study of reported cases was continued during 1951, and new forms which have been recommended for adoption by other States were prepared. The need for a statistical expert to prepare and collate the vital statistics of the common infectious diseases was apparent during the year.

The panel of diagnostic consultants retained for the diagnosis of poliomyelitis cases continued their valuable activities during 1951. Attention is again drawn to the complete absence of diagnostic-laboratory facilities in Victoria for one of the most important infectious diseases in the State. As stated in last year's report, even the most experienced clinicians are unable to say with complete certainty whether a case is one of poliomyelitis even though the patient is dying as a result of paralysis. Accurate diagnosis will not be possible until adequate laboratory facilities are made available in Victoria. The development of tissure-culture techniques for the laboratory study of poliomyelitis in the United States of America has made laboratory studies practical and relatively inexpensive.

The absence of diagnostic (and other) laboratory facilities for poliomyelitis in Victoria will undoubtedy retard progress in the control of poliomyelitis in Victoria.

Adequate facilities are available throughout Victoria for the treatment of acute cases of poliomyelitis and provision is being made for future requirements.

After-care clinics are now conducted in all the large centres of population by orthopaedic consultants and departmental medical officers. Three full-time medical officers are now engaged in the study of all aspects of poliomyelitis including after-care treatment.

The physiotherapy staff of the Department has been augmented during the past year and now includes a senior physiotherapist, 7 full-time and 4 part-time physiotherapists, and 9 physiotherapy assistants. The itinerant work has been extended and a home-treatment service is now provided in the Gippsland and North-Eastern areas of the State. There is still an urgent need for additional staff to enable extension of the home-treatment service to all parts of Victoria.

Three full-time nurses have been engaged on poliomyelitis work and their services have proved extremely valuable.

The poliomyelitis unit of the Department has now acquired the status of a division in the General Health Branch and the Secretary of the Consultative Council has been made Assistant Secretary of the General Health Branch and administrative officer of the poliomyelitis division.

After-care accommodation for poliomyelitis patients was again barely adequate during the past year. No further progress has been made towards the provision of a separate permanent after-care unit for poliomyelitis.

Financial assistance was given by the Government to the Red Cross Society for the continuing function of Welfare House. The future of Welfare House is at present under consideration. It has been recommended that Welfare House be transferred to the Lady Dugan Home and that the Government finance the running of the hostel and that Red Cross act as housekeepers.

The demand for splints and appliances continued during the past year and the provision of these constituted the largest single financial commitment for the year.

The staff of the observatory clinic have continued their valuable service in undertaking the psychiatric management of all cases of poliomyelitis referred to them, and in making available the services of a medical social worker to assist in overcoming difficulties in the home-mangement of patients.

The appointment of a special officer in the Education Department to co-ordinate the education of physically-handicapped patients, marks another step forward in the provisions for adequate care of poliomyelitis patients.

A post-graduate symposium on poliomyelitis under the auspices of the Melbourne Permanent Post-graduate Committee aroused considerable interest in the medical profession and was a further step in the post-graduate education of the profession in reference to poliomyelitis.

The clinical research project being conducted conjointly by the Physiology Department of the Melbourne University and the Health Department was continued throughout the year.

Again, as during the preceding year, the inadequate office accommodation provided for the poliomyelitis division and for the treatment of ambulant cases of poliomyelitis, meant considerable hardship to patients and staff, and a less efficient service than would otherwise be possible. All efforts to obtain adequate accommodation have so far been fruitless and a recommendation was made over a year ago that a suitable building be erected.

The Consultative Council on Poliomyelitis, an advisory body to the Minister, met eighteen times during the past year. Again the advice and recommendations of the Consultative Council have been adopted throughout the year as the policy of the department.

The National Health and Medical Research Council during the past year formed a poliomyelitis committee consisting of representatives of all States of the Commonwealth. This committee held its first meeting in Adelaide during February, 1952. The committee's recommendations were incorporated in a report which was considered by the parent body at its meeting in May, 1952.

Advice regarding public health measures was issued to the medical profession during the year—particular attention being given to atypical forms of poliomyelitis and to the need for medical surveillance of adult contacts who were food handlers.

RECOMMENDATIONS.

The following recommendations, although made in previous years, are still current :—

(1) That a statistical expert be appointed to the Department.

(2) That a permanent and separate after-care institute be established for the after-care treatment of cases of poliomyelitis.

(3) That a poliomyelitis centre be built to provide a day clinic for the treatment of poliomyelitis patients and to house the poliomyelitis division.

(4) That adequate laboratory facilities be established in Victoria for the study of poliomyelitis viruses.

BERTRAM P. McCLOSKEY.

REPORT OF THE GOVERNMENT CHEMIST FOR THE YEAR ENDING 30th JUNE, 1952.

STAFF.

During the year, the Public Service Board decided that, in order to provide closer co-operation between the medico-legal chemists and the Coroner, these chemists be transferred from the Health Department to the Crown Law Department, and that their laboratory be located at the Morgue. Pending provision of this laboratory accommodation, the medico-legal chemists are still housed at State Laboratories.

GENERAL.

The number and type of samples submitted during the past year, mainly by the Department and by Municipal Inspectors, as shown in the attached table, which also indicates the number of samples found to be "adulterated," or not in accordance with a prescribed standard. In addition, 282 samples were analysed for other Departments, mainly milks taken by officers of the Department of Agriculture under the provisions of the Health Act. In addition, 137 specimens of viscera from animals were analysed for poisons for the same Department.

The total number of samples from Departmental and Municipal Inspectors is practically the same as last year. The proportion of adulterated samples is considerably less than in the previous year, and is about an average figure. The bulk of the adulterated samples were sausages with excess preservative or chopped meat containing non-permitted preservatives. A number of sausage samples were again below the prescribed minimum in meat content.

The proportion of adulterated milks in the main table is much lower than last year, but a considerable number of the milk samples shown as from other Departments were below the prescribed standard or contained added water.

EFFLUENTS.

Most of the effluent samples were taken by the Chief Engineer in connection with the efficiency of country sewerage works and these, again are less in number than in the previous year. Other samples were of trade effluents suspected of stream pollution.

INDUSTRIAL HYGIENE.

A portion of the chemical work required by the Medical Officer of Industrial Hygiene continues to be carried out in this laboratory. A lengthy investigation has just been completed to formulate a satisfactory method for the determination of benzene, especially in small amounts and for legal purposes, in solvents and in preparations containing solvents.

MISCELLANEOUS SAMPLES OF INTEREST.

Fluoride Content of Waters.

The survey of Victorian water supplies for fluoride content has been continued.

Canned Meats.

At the request of the Food Standards Committee, a physical and chemical investigation has been made of the various meat packs on the local market. This has shown a wide variation in the meat content of different brands of the same type of product and supports the contention that standards are necessary for such packs.

Meat Pies.

Also at the request of this Committee, a survey was made of the meat content of all brands of meat pies available.

Cotton Wastes.

Five samples of imported cotton waste suspected of containing barium salts, were examined. All were free from soluble barium compounds but one contained an appreciable quantity of barium sulphate.

Herbal Remedy.

A herbal remedy, consisting of flower petals, was coated with a red powder, suspected of being red lead; it proved to be a vegetable colouring.

Reconstituted Milk.

With a shortage of normal milk, reconstituted milk has appeared on the market. Samples submitted were proved to be reconstituted and complied with the prescribed standard.

Beer Suspected of Added Water.

A few samples of beer, suspected of having been adulterated with water, were examined; anlaysis showed the suspicion to be unfounded.

SAMPLES SUBMITTED BY (A) MUNICIPAL HEALTH INSPECTORS, AND (B) TAKEN BY DEPARTMENTAL OFFICERS, ETC., AND ANALYSED AT THE DEPARTMENT'S LABORATORY FOR THE PERIOD TWELVE MONTHS ENDED 30TH JUNE, 1952.

Sample.	A.		B.	
	Number Submitted.	Adulterated or not Genuine.	Number Submitted.	Adulterated or not Genuine.
Beer	..	..	5	..
Bread	4	..	..	..
Butter	29	1	9	..
Cereals, Grains, &c.	5	..	..	..
Cheese	7	..	..	..
Chutney, Fruit	1	..	..	..
Cocoa	2	..	..	..
Coffee	2	..	..	..
Coffee and Chicory	3	..	..	..
Coffee and Chicory Essence	3	..	..	..
Confectionery	3	..	1	..
Cordials and Syrups, Flavoured	1	..	..	..
Cordials and Syrups, Fruit Juice	4	..	..	..
Cordials and Syrups, Imitation	1	..	..	..
Corn Flour, &c.	6	..	..	..
Cream	5	..	..	..
Cream of Tartar	1	..	..	..
Custard Powder	7	..	..	..
Drinks, Summer and Temperance	14	..	2	..
Effluents	24	..	120	..
Fats and Oils	1	..	..	..
Fish, Tinned	..	..	1	..
Flocks and Rags	..	..	12	..
Flour, Self-raising	4	..	..	..
Fruit, Dried	1	..	..	..
Fruit Juices	..	..	1	..
Honey	3	..	..	..
Ice Cream, Ice Blocks, &c.	5	..	..	..
Infants' Food	2	..	..	..
Jam and Conserve	8	..	..	..
Jelly Crystals, Fruit	1	..	..	..
Lard and Dripping	1	..	..	..
Meat, Canned	..	..	36	..
Meat, Chopped	56	16	5	2
Meat, Fresh	1	..	..	..
Meat, Manufactured	13	..	15	..
Meat Paste	..	..	1	..
Meat Sausages	136	24	15	2
Milks	428	7	97	..
Milk, Breast	..	..	11	..
Milk, Condensed	1	..	..	..
Miscellaneous	10	1*	11	..
Miscellaneous, Industrial Hygiene Branch	..	..	51	..
Mustard	2	..	..	..

* Lanoline.

SAMPLES SUBMITTED, ETC.—*continued.*

Sample.	A.		B.	
	Number Submitted.	Adulterated or not Genuine.	Number Submitted.	Adulterated or not Genuine.
Pastry, Pastry Mix ..	7	..	..	..
Pepper	2	..	..	..
Sauce, Tomato ..	3	..	..	..
Sauce, Worcestershire..	2	..	..	..
Spirits, Brandy ..	1	..	8	4
Spirits, Schnapps ..	..	..	2	1
Spirits, Whisky ..	..	..	18	9
Sugar	7	..	2	..
Tea	6	..	..	..
Vegetables	..	..	1	..
Vinegar	12	..	..	..
Water	4	..	115	..
Wine	..	..	2	..
Total ..	839	49	541	18

Total number of samples submitted	..	1,380
Number adulterated or not genuine	67	
Additonal samples analysed for other Departments :—		
Milks	272	
Effluents	10	
		282
Total Number of Samples Analysed	..	1,662

W. R. JEWELL, M.Sc.,
Government Chemist.

REPORT OF THE PUBLIC HEALTH BACTERIOLOGICAL LABORATORY.

During the past twelve months, the total number of examinations has been 64,317. There has been a marked increase in examinations for drug sensitivity of organisms isolated and in the number of water specimens bacteriologically examined.

A number of new techniques has been explored and added to the general routine work in the laboratories.

A modification of the Coombs test to the Brucella abortus agglutination test was introduced by the Assistant Director, Dr. Michael Wilson. He has published also an evaluation of Fluorescent microscopy in the examination of sputum for the Tubercle bacillus, demonstrating the advantage of this method over the Ziehl-Neelsen staining technique.

A method of typing Sh. flexner used in the British P.H.L.S. Dysentery Reference Laboratory has been introduced by Dr. S. Ormerod.

A number of small epidemics has been investigated and the laboratory assists the State Health Officers and general practitioners in such investigations.

The Staff of the Laboratories is as follows :—

Director—

Professor S. D. Rubbo, Ph.D., Bact. (Lond.); B.Sc., M.P.S. (Syd.); M.B.B.S. (Melb.).

Assistant Director—

Dr. Michael Wilson, M.A., M.B.B.Ch. (Cantab.).

Deputy Assistant Director—

Dr. Stephen Ormerod, M.A., B.M., B.Ch. (Oxon).

General Bacteriology—

Mr. A. Davidson, B.Sc.
Miss R. Thomas, B.Sc.
Miss J. Taplin, B.Sc.
Miss E. Merrifield.

Branch Laboratory for Tuberculosis—

Mr. L. J. Swaby, B.Ag.Sc.
Mrs. L. Price, B.Sc.
Mr. W. L. Webb.
Miss J. Cole.

Branch Laboratory for V.D. Serology—

Miss D. Grant.
Mrs. E. Spink.
Mrs. S. Millstein.
Miss L. Nutting.

Secretarial Staff—

Miss M. Preston.
Miss F. Rabl.
Miss M. Krohn.

BRANCH LABORATORY FOR TUBERCULOSIS.

The increase in request for examinations for *Myco. tuberculosis* noted in the 1950 report continued during 1951, the total number of examinations rising from 18,600 to 20,500. Part of the increase was due to the introduction of drug sensitivity tests to anti-tuberculosis chemotherapeutic agents.

Drug-sensitivity tests were modified in the Laboratory to ascertain sensitivity of *Myco. tuberculosis* recovered from pathological fluids from patients receiving Streptomycin, Para-amino-salicylic acid, and various thio-semi-carbazones.

This work accounts for the increase of sensitivity tests performed, from 75 during 1950, to 419 during the past year, thereby necessitating the employment of a full-time graduate on sensitivity tests alone.

Number of Examinations for 1951.

—	Jan.–March.	April–June.	July–Sept.	Oct.–Dec.	Total.
Diphtheria—					
Cultures	820	758	718	861	3,157
Virulence tests	5	9	4	7	25
Intestinal Infections, P.U.O., &c.—					
Agglutination tests	155	163	198	168	684
Cultures, Faeces, and Urine	292	244	215	266	1,017
Gonorrhoea—					
Direct smears	338	322	302	254	1,216
Comp. fixation tests	394	381	391	293	1,459
Scarlet Fever, &c.—					
Cultures	547	768	675	579	2,569
Lancefield groupings	111	163	145	153	572
Antistreptolysin titres	87	86	55	29	257
Special Investigations—					
Drug sensitivity tests	70	136	310	387	903
Sundries	182	236	276	262	956
Syphilis—					
Wassermann tests	2,855	3,136	2,909	2,699	11,599
Titres	437	539	433	296	1,705
Kahn tests	4,378	4,749	4,579	4,333	18,039
Tuberculosis—					
Direct smears	3,316	4,187	4,062	3,428	14,993
Cultures	1,128	1,423	1,253	987	4,791
Guinea pig inoculations	57	66	57	76	256
Water Samples—					
Bacteriological analysis	45	28	23	23	119
	15,217	17,394	16,605	15,101	64,317

REPORTS OF DISTRICT HEALTH OFFICERS.—CENTRAL HEALTH AREA—1951.

Administration.

District Staff :—

Dr. R. Farnbach, S.H.O.
Dr. E. F. Mackenzie, D.H.O.
Mr. K. Holland, D.H.I.
Mr. J. McCartney, H.I.
Mr. J. Leffers, D.H.I.
Mr. K. Hutchison, H.I.

Number of Municipal Districts :—

Cities	30
Boroughs	1
Shires	9

Population, 1,436,525.

Size of Area, 2,340 square miles.
Number of Medical Officers of Health, 44.
Number of Health Inspectors, 68.
Number of Groups, 3.

Infectious Diseases.

—	D.	S.F.	Ty.	T.B.	I.P.	Dys. (*a*).	Dys. (*b*).	P.F.	C.S.M.	Hydatid.	Exudative Pleurisy.	Erythema Nodosum.	Rubella.	Tet.	Mal.	Anch.	U.F.	Leprosy.
1951 ..	120	551	7	723	125	18	59	..	59	2	11	15	132	1	3	..	3	2†
1950 ..	173	582	16	545	72	74	..	4	37	..	4	11	*	5	6	17	5	..

* Not notifiable.

† Contracted outside Australia.

The following table gives a summary of the work carried out by the Inspectors on the Staff :—

Inspections.

Abattoirs	78
Bakehouses	63
Boarding Houses	23
Butchers	97
Camps	6
Cattle Saleyards	15
Dairies	28
Eating Houses	33
Enquiries (Investigations)	392
Factories	62
Grocers	37
Hotels	31
Markets	43
Offensive Trades (other than abattoirs) ..	78
Public Buildings (including Racecourses and football grounds)	69
Sanitary (including trade wastes) ..	184
Shops (various)	59
Vehicles	46
Garbage Depots	114
Nightsoil Depots	14

Investigations included inquiries into :—Transport and sale of cream, bread wrapping, smoke nuisances, underweight calves, meat transport, meat inspection depots, amenities at abattoirs, sale of frozen meat, capping and bottling of milk, marketing of fish, stream pollution.

During the year investigations in regard to quality and labelling of foodstuffs and drugs were made and samples of the following were taken :—Milk, cream, cheese, castor sugar, butter, smoked fish, canned rabbit, sugar, chopped meat, sausages, manufactured meats, malted milk, summer drinks, tinned fish, peas, disinfectants, patent medicines. Various suggestions on alterations to Food and Drug Standards Regulations were made.

Consignments of tinned fish, peas, meat, considered unfit for human consumption on account of contamination and deterioration were either seized or voluntarily destroyed.

Meat Areas.

Meat Areas.	Population Served.	Meat Areas.	Population Served.
Box Hill ..	31,569	Northcote ..	43,000
Brighton ..	42,907	Nunawading ..	16,700
Brunswick ..	57,865	Oakleigh ..	18,250
Camberwell ..	94,797	Port Melbourne ..	14,500
Caulfield ..	84,960	Prahran ..	63,000
Coburg	61,000	Preston ..	50,000
Collingwood ..	27,700	Richmond ..	38,500
Essendon ..	59,000	Sandringham ..	32,000
Fitzroy	33,500	St. Kilda ..	57,300
Footscray ..	56,770	South Melbourne ..	44,205
Hawthorn ..	40,593	Sunshine ..	18,000
Heidelberg ..	51,811	Williamstown ..	36,071
Kew	35,000	Doncaster ..	4,800
Malvern ..	50,000	Dandenong ..	18,500
Melbourne ..	102,000	Keilor	5,863
Moorabbin ..	46,350	Mulgrave ..	7,500
Mordialloc ..	17,800		

Sewerage Areas.

Melbourne and Metropolitan Board of Works—

Box Hill	Heidelberg	Preston
Brighton	Kew	Richmond
Brunswick	Malvern	Sandringham
Camberwell	Melbourne	St. Kilda
Caulfield	Moorabbin	South Melbourne
Coburg	Mordialloc	Sunshine
Collingwood	Northcote	Williamstown
Essendon	Nunawading	Broadmeadows
Fitzroy	Oakleigh	Keilor
Footscray	Port Melbourne	Mulgrave
Hawthorn	Prahran	

Dandenong Sewerage Authority, Dandenong.

Septic Tanks.

Number in Area, 9,032.

Nightsoil Depots.

Number in Area, 11.
Nightsoil Pans, 44,761.

Septic tanks again show an increase. This year 1,600 tanks were installed and 8,200 odd additional pan services have been provided by Councils.

Water Supply.

Melbourne and Metropolitan Board of Works—

Box Hill	Malvern	St. Kilda
Brighton	Melbourne	South Melbourne
Brunswick	Moorabbin	Sunshine
Camberwell	Mordialloc	Williamstown
Caulfield	Northcote	Broadmeadows
Coburg	Nunawading	Doncaster
Collingwood	Oakleigh	Eltham
Essendon	Port Melbourne	Ferntree Gully
Fitzroy	Prahran	Keilor
Footscray	Preston	Lilydale
Hawthorn	Richmond	Mulgrave
Heildelberg	Ringwood	Werribee
Kew	Sandringham	Whittlesea

S.R.W.S.—

Chelsea	Dandenong

Offensive Trades.

Abattoirs or slaughter-houses	22
Blood albumen factories or blood-boiling or blood-drying works	Nil
Bone-boiling or burning or grinding or milling works	Nil
Bone manure depots	1
Fat extracting or melting or rendering works	166
Fellmongeries or wool-scouring or wool-washing works	28
Flock shoddy or mungo factories	16
Glue or size factories	4
Gut-cleaning or gut-scraping or gut-drying or gut-spinning works	9
Knackers' yards	5
Manure works	3
Marine stores	41
Piggeries	37
Poultry-killing or cleaning or dressing	53
Rag-picking or rag-sorting	8
Soap or candle works	12
Soup-drying works	Nil
Stores for skins, hides, hoofs, hair or bones	53
Tripe-boiling establishments	4
Meat boiling-down works (bones, blood, offal)	4
Fish curing	6
Pan changing, storing depots	3
Nightsoil depots	8
Garbage, refuse depots	21
Cattle sale yards	3
Total number of offensive trades	509

Food Samples.

Samples taken in area	4,283
Samples necessary	4,307
Samples found adulterated	307
Samples found adulterated in which no action was taken by Council	30

Boarding Houses.

These premises are registered with the Council concerned and are supervised by the Municipal Health Inspectors.

Boarding houses	1,744
Beds	30,472

E. FORBES MACKENZIE,
District Health Officer.

EASTERN HEALTH AREA.

Administration.

District Health Officer .. Dr. N. M. Dalton.
District Health Inspector .. Mr. J. J. Willoughby.
District Tuberculosis Nurse Sister D. Bowden.

The Eastern Health Area comprises 27 municipalities with a total population of 190,162 and embraces an area of 17,146 square miles.

The area is divided into twelve Health Groups each employing Medical Officers of Health and a Health Inspector; and four separate municipalities, each employing a Medical Officer of Health and a Health Inspector.

Infectious Diseases.

In 1951, the following infectious diseases were reported :—

Disease.	Number of Cases Notified.
Diphtheria	4
Scarlet Fever	102
Typhoid	..
Tuberculosis	58
Poliomyelitis	45
Amoebic Dysentery	1
Cerebro-spinal Meningitis	13
Rubella	49
Anchylostomiasis	1
Undulant Fever	5
Encephalitis	2
Hydatid	1
Erythema Nodosum	2
Exudative Pleurisy	1
Tetanus	..

These figures show that the incidence of Diphtheria and Typhoid has continued to diminish.

Tuberculosis Visiting Nurse.

The services of Sister D. Bowden as visiting nurse were available only for the first half of the year. During this time tuberculosis cases throughout the area were visited by her and preventive measures discussed in the home and with contacts.

The following is a summary of her work during this time :—

Number of homes visited	95
Number of patients visited	85
Number of contacts visited	172
Number of X-rays ordered	6

District Health Inspector.

Inspections carried out :—

Abattoirs	139
Bakehouses	74
Boarding Houses	21
Butchers	79
Camps	32
Cattle Sale Yards	16
Dairies	9
Eating Houses	74
Enquiries	455
Factories	29
Grocers	53
Hotels	55
Markets	11
Offensive Trades	130
Private Hospitals	1
Public Buildings	14
Sanitary Depots	219
Shops	120
Vehicles	78
Total	1,609

Condemned.	Number.	Reason.
Meat—		
Livers, sheep ..	43	Presence of hydatid
Livers, sheep ..	3	Presence of hydatids and fluke
Livers, ox	10	Presence of fluke
Other Foods—		
Fish, tinned ..	10	Blown tins
Chocolate, block ..	6 lb.	Presence of weevils

Sample Taken.	Number.	Analysis.
Effluents	6	Chemical
Water	13	Chemical
Water	4	Bacteriological
Butter	2	Chemical

Prosecution Reports were made against seven persons, involving three breaches of the Act and twelve of the Regulations.

Meat Areas.

Meat Areas exist at Sale, Morwell, Yallourn, Traralgon, Frankston–Hastings, and Mornington.

Investigations have been continued throughout the Eastern Area with a view to extending the areas of meat supervision.

Sanitation.

(*a*) Sewerage areas exist at Bairnsdale, Warragul, Morwell, and Mornington. Works are partly completed at Maffra, Traralgon, Leongatha, and Yallourn.

(*b*) There are 39 nightsoil depots in the area and 4,303 septic tanks.

(*c*) State Rivers and Water Supply——

Berwick	Cranbourne	Frankston	Wonthaggi
Bass	Flinders	Mornington	

Water Trusts exist at: Orbost, Omeo, Stratford, Bairnsdale, Maffra, Sale, Rosedale, Traralgon, Leongatha, Yallourn, Morwell, Moe, Trafalgar, Warragul, Drouin, Korumburra, Foster, Toora, Yarram, Mirboo North, Westernport.

Offensive Trades.

Abattoirs ..	101	
Cattle Sale Yards ..	59	
Nightsoil Depots ..	39	
Refuse Tips ..	31	
Miscellaneous ..	57	which includes skin stores, fat rendering, Knackers' yards, and poultry dressing
Total ..	287	

Food Samples.

During the year samples of various foodstuffs were taken by the municipalities in the area. These were all submitted for analysis and action taken where necessary.

Number of samples taken	427
Number found to be adulterated ..	37
Number in which legal action was taken ..	12
Number warned	13

NORMAN DALTON,
District Health Officer.

WESTERN HEALTH AREA.

Administration.

District Health Officer ..	Dr. E. Forbes Mackenzie.
District Health Inspector..	Mr. L. N. Strahle.
Chest Clinic Medical Officer	Dr. D. N. L. Seward.
Chest Clinic Sister ..	Miss J. Brown.
Chest Clinic Assistant ..	Mrs. J. Waterworth.
Tuberculosis District Sister	Sister G. Sweeting.
Visiting Sister	Sister D. Rogers.

The Western Health Area comprises 34 municipalities occupying a total area of 16,411 square miles and with a population of 206,607.

Municipalities employed 39 Medical Officers of Health and eighteen Health Inspectors, several acting for more than one municipality.

Infectious Diseases Statistics.

The following notifications were received for the year :—

Disease.	Number of Cases Notified.
Diptheria	29
Scarlet Fever	102
Pulmonary Tuberculosis	68
Poliomyelitis	59
Cerebro-spinal Meningitis	6
Tetanus	2
Typhoid	2
Hydatids	9

B.C.G. campaigns were conducted in co-operation with Tuberculosis Officers in the main centres including—

Geelong	Warrnambool
Portland	Hamilton

Tuberculosis Visiting Nurse.

Cases were visited by Sister G. Sweeting in the Western Area. Towards the end of the year Sister Rogers continued this work following the retirement of Sister Sweeting.

Number of homes visited	478
Number of T.B. patients visited ..	240
Number of contacts visited	612
Number of X-rays ordered	525

District Health Inspector.

Mr. Strahle carried out routine inspections in co-operation with municipal officers. He helped to organize and carry out numerous diphtheria immunization campaigns throughout the Western Area as well as arranging and assisting at B.C.G. campaigns.

Meat Areas.

There has been no change in the Meat Areas.

Sanitation.

The following Sewerage Authorities exist in the Western Area :—

Geelong Waterworks and Sewerage Trust.
Warrnambool Sewerage Authority.
Ararat Sewerage Authority.
Colac Sewerage Authority.
Hamilton Sewerage Authority.
Portland Sewerage Authority.
Queenscliffe Sewerage Authority.
Lorne Sewerage Authority.

There are 31 Nightsoil Depots in the area and more than 1,600 Septic Tanks.

Water Supply.

There have been no additions to the Water Trusts and State Rivers and Water Supply Districts recorded in the previous report.

Offensive Trades.

There has been no material change in the constitution of the registered offensive trades during the past year.

Food Samples.

Available records show that throughout the year municipal health inspectors submitted the following for analysis :—

Samples taken	257
Number found to be adulterated	10

(Appropriate action was taken in each instance.)

E. FORBES MACKENZIE,
District Health Officer.

NORTHERN HEALTH AREA.

District Health Officer	Dr. W. J. Stevenson.
District Tuberculosis Officer (Bendigo)	Dr. K. G. Kerr.
District Health Inspector	Mr. D. L. Lyall.
District Visiting Sister, Tuberculosis	Miss P. Burlinson.
Chest Clinic Sister (Bendigo)	Miss E. Neilson.

During the year Miss Burlinson resigned from her position as Visiting Sister.

Number of Municipal Districts.

Cities	2
Boroughs	4
Shires	18
	24

Population of Area, 146,783.
Size of Area, 21,829 sqaure miles.
Medical Officers of Health, 29.

Health Inspectors.

Allocation of Inspectors—

4 in Groups ;

2 in Shires from Groups outside Area ;

2 in Bendigo ;

1 in Mildura City ;

1 in Mildura Shire ;

1 in Swan Hill Borough.

Two vacancies occurred during the year, but were not filled by December.

All municipalities are served by Medical Officers of Health and Health Inspectors.

Murray Valley Encephalitis.

No cases of this disease were reported during the summer of 1951–52.

A research team from the Walter and Eliza Hall Institute made their headquarters at Merbein and carried out extensive studies into the reservoir and mode of transmission of the virus.

Division of Chest X-ray Surveys for Year Ending 31st December, 1951.

Survey.	Micro Films Taken.	T.B. Abnormalities.		Non-T.B. Abnormals.
		Proved and Possibly Active.	Healed or Quiescent.	
Cities—				
Mildura	5,369	9	83	85
Towns—				
St. Arnaud	1,170	5	20	16
Boroughs—				
Swan Hill	4,292	9	34	55
Shires—				
Bet Bet—				
Dunolly	474	2	7	7
Tarnagulla	181	1	8	13
Cohuna—				
Cohuna	1,508	3	12	33
Kerang—				
Kerang	2,046	3	24	21
Mildura—				
Irymple	605	..	11	9
Merbein	1,599	5	19	39
Red Cliffs	1,828	6	22	12
Swan Hill—				
Robinvale	546	3	7	5
Total	19,618	46	247	295

Infectious Diseases.

Statistics for Year ending 31st December, 1951.

Disease.	Number of Cases.
Diphtheria	5
Scarlet Fever	27
Typhoid	2
Tuberculosis	54
Cerebro-spinal meningitis	9
Poliomyelitis	34
Rubella	3
Encephalitis (all forms)	6
Exudative Pleurisy	1
Hydatid	1
Polioencephalitis	1
Tetanus	3
Undulant Fever	1

District Health Inspector.

Inspections carried out :—

Abattoirs	47
Bakehouses, pastrycooks, &c.	51
Boarding houses	21
Butchers	51
Dairies	6
Eating houses, cafes, &c.	71
Enquiries (investigations, &c.)	14
Factories (food), butter, cheese, bacon, cordial	31
Grocers	57
Hotels, wine saloons, &c.	41
Offensive trades	83
Public buildings	3
Sanitary depots	27
Shops (various)	42
Vehicles (delivery)	17
Racecourses, showgrounds, recreation grounds, swimming baths, camping grounds	37
Septic tanks	54
Drainage	21
Sundry inspections	49
Iceworks	7
Water supplies	11
Water samples (chemical and bacteriological)	23
Food samples	6

Offensive Trades.

Offensive Trade.	Number in Area.
Abattoirs	51
Gut cleaning	1
Knackers' yards	1
Marine Stores	4
Piggeries	33
Poultry killing	4
Skin stores	20
Cattle saleyards	22
Garbage depots	33
Fat extraction	4
Bone boiling down	1
Total	174

Food Samples.

Number of samples taken ..	295	
Number of samples adulterated ..	26	
Number of adulterated samples in which no action taken ..	9	
Convictions	14	(three cases dismissed)

Note.—There are still a number of Councils in whose areas the minimum statutory number of samples have not been taken. In a number of areas, the type of the samples taken does not reflect a cross section of local products and consists wholly or in part of packaged goods from outside sources.

Meat Areas.

Meat Area.	Population Served.
Bendigo	36,140
Mildura	24,250

During the year the following areas were gazetted as meat areas :—Borough of Eaglehawk and Township of Kangaroo Flat, plus a small adjoining area of the Parish of Mandurang.

Sewerage Areas.

Existing—

Bendigo .. Bendigo Sewerage Authority.
Kerang .. Kerang Sewerage Authority.
Mildura .. Mildura Sewerage Authority.
Swan Hill .. Swan Hill Sewerage Authority.

Proposed :—

Charlton .. Charlton Sewerage Authority.

Septic Tanks.

Number in area, 655.

Chemical Closets.

Number in area, 19.

Nightsoil Depots and Services.

Number in area, 53 (12,170 pans).

Whilst some of the difficulties experienced in recent years with contractors, labour and pan shortages have been overcome, the position generally could be improved.

An effort is being made to encourage the installation of septic closets in areas where these is a limited water supply.

Water Supplies.

Names of Trusts, &c. :—

Birchip Urban Waterworks District.
Elmore Water Trust.
Inglewood Water Supply District.
Kerang Waterworks Trust.
Mildura Urban Water Trust.
Heathcote Waterworks Trust.
Swan Hill Waterworks Trust.
St. Arnaud Borough Waterworks Trust.
Murrayville Waterworks Trust.

State Rivers and Water Supply Commission supplies water to a large number of townships in Northern Area.

W. J. STEVENSON,
District Health Officer.

NORTH-EASTERN HEALTH AREA.

District Health Officer .. Dr. E. J. Crowe.
District Health Inspector .. Mr. E. S. A. Wing.
District Tuberculosis Nurse .. Sister J. Hevey.

The North-Eastern Area comprises 35 municipalities with an area of 17,526 square miles. The estimated population is 157,099. There were 37 Medical Officers of Health in the area, and ten Health Inspectors, working for individual municipalities and in seven Health Groups.

Infectious Diseases.

The following shows the notifications of Infectious Diseases for the year, with figures for the previous year for comparison.

Disease.	1951.	1950.
Diphtheria	32	82
Scarlet Fever	51	92
Typhoid	1	..
Pulmonary Tuberculosis	31	50
Poliomyelitis	119	20
Cerebro-spinal Meningitis	12	5
Rubella	21	N.N.
Dysentery, Amoebic	1	..
Dysentery, Bacillary	3	..
Encephalitis	3	..
Undulant Fever	2	..
Hydatid Disease	1	..
Anchylostomiasis	..	2
Paratyphoid Fever	1	..

The increased incidence of Polio was due to localised outbreaks in Benalla Borough and Shire, and in Wodonga. Generally, the cases were milder in character than in the 1949 epidemic.

The Medical Officer of Health reported a number of cases of gastro-enteritis at Wood's Point, which on investigation were found to be Sonnei dysentery. The milk, water supply, and food handlers in the town were checked, and it was considered that the infection was probably fly-borne, with a possibility of case to case spread.

Visiting Tuberculosis Nurse.

Sister Hevey continued her work of visiting tuberculosis cases and contacts, and arranging X-ray and Sputum examinations. She assisted in the Mantoux–B.C.G. campaigns carried out during the year, and followed up positive mantoux reactors and their contacts.

Number of homes visited (T.B. cases—contacts)	130
Number of contacts of positive mantoux reactors visited	336
Number of X-rays of positive reactors and contacts	359

Mantoux Testing and B.C.G. Inoculation, North-East Area, carried out by Dr. Holder and the District Health Officer.

Municipality.	Number Mantoux Tested.	Number Mantoux Positive.	Percentage Positive.	Number Given B.C.G.	Doubtful Reactors Not Given B.C.G.
Echuca	364	29	8·0	335	..
Shepparton	587	46	7·8	541	..
Tongala	32	2	6·2	30	..
Rodney	155	5	3·2	150	..
Numurkah	188	11	6·0	177	..
Rochester	72	3	4·2	69	..
Seymour	186	21	11·3	165	..
Kilmore	196	29	14·8	167	..
Yarrawonga	102	7	6·9	95	..
Yea	30	4	13·4	26	..
Upper Yarra and Healesville	130	20	15·4	110	..
Wangaratta	575	63	11·4	490	22
Beechworth	94	9	10·0	81	4
Myrtleford and Bright	48	2	4·3	45	1
Alexandra	95	4	4·7	81	10
Mansfield	61	5	8·3	55	1
Euroa	99	7	7·1	91	1
Wodonga	75	11	15·3	61	3
Benalla	221	20	9·1	196	5
Rutherglen	67	5	7·8	59	3
Dookie College	114	31	27·2	83	..
Totals	3,491	334	9·6	3,107	50

Division of Chest X-ray Surveys.

Surveys conducted North-Eastern Health Area, Year ended, 31st December, 1951.

Survey.	Micro Films Taken.	T.B. Abnormalities.		
		Proved or Possibly Active.	Healed or Quiescent.	Non-T.B. Abnormalities.
Cities—				
Shepparton	4,249	4	36	61
Boroughs—				
Benalla	2,303	3	22	31
Echuca	3,034	2	29	34
Wangaratta	4,759	9	68	59
Shires—				
Benalla—				
Devenish	118	..	2	1
Glenrowan	48	..	3	2
Deakin—				
Girgarre	159	..	5	2
Tongala	546	2	4	1
Euroa	1,550	2	25	27
Oxley—				
Moyhu	451	3	14	2
Rodney—				
Ardmona	82	..	2	2
Kyabram	1,860	4	25	43
Merrigum	269	1	2	2
Mooroopna	761	2	7	7
Tatura	1,097	2	2	1
Shepparton—				
Dookie	199	..	1	2
Tallygaroopna	200	..	2	10
Violet Town	354	3	5	7
Total	22,029	37	254	294

District Health Inspector.

Mr. Wing assisted in the organization and conduct of immunization and vaccination campaigns, and in the investigation of infectious disease outbreaks, and attended to complaints and enquiries in the area, in addition to carrying out the following inspections :—

Abattoirs and slaughter yards	72
Bakehouses	30
Boarding houses	30
Butchers	67
Camping areas	20
Cattle saleyards	9
Dairies	12
Eating houses	51
General investigations	40
Factories	10
Grocers and shops	38
Hotels	22
Other offensive trades	23
Private hospitals	4
Public buildings	7
Sanitary depots and tips	6
Vehicles	9
Sports grounds and race courses	6

Prosecutions.

Benalla	Butcher; information for Council; dirty premises; fined £3, costs £7 7s.
Benalla	Adulterated sausage meat; fined £6, costs £8.

Witness for Prosecution.

Shepparton City	Butcher: Fined £10, costs £2.
Rochester	Butcher; raw offal to pigs; fined £4, costs £2 2s.
Rochester	Butcher; raw offal to pigs; fined £1, costs £2 2s.
Healesville	Butcher; dirty premises; fined £12, costs £4.

Meat Areas.

Shepparton	Borough and adjoining portion of the Shire.
Rodney	Mooroopna, Tatura, and the central part of Rodney Shire.
Wangaratta	Wangaratta Borough, and small areas of the Shire of Wangaratta and Oxley.
Echuca	The area of the Borough of Echuca, and portion of Deakin Shire.
Kilmore	The area of the bacon factories in Kilmore township.

Some progress has been made with the proposed construction of a municipal abattoir in Kyabram.

Sanitation.

Existing Sewerage Areas :—

Benalla, Echuca, Shepparton, Kyabram, Wangaratta, Yarrawonga.

Proposed Sewerage Areas :—

Beechworth, Euroa, Wodonga, Yea.

There are 2,047 septic tanks in the area, 53 registered nightsoil depots, while 22 municipalities have initiated garbage clearance service.

Water Supply.

The following 42 Trusts are in existence :—

Alexandra	Myrtleford
Avenel	Nagambie
Beechworth	Numurkah
Benalla	Rochester
Bright	Rushworth
Broadford	Rutherglen
Chiltern	Shepparton (Urban)
Cobram	Shepparton (Shire)
Corryong	Tallangatta
Echuca	Tatura
Euroa	Tongala
Glenrowan	Tungamah
Healesville	Violet Town
Kiewa	Wahgunyah
Kilmore	Wangaratta
Kyabram	Warburton
Longwood	Wodonga
Mansfield	Yackandandah
Merrigum	Yarra Junction
Mooroopna	Yarrawonga
Murchison	Yea

During the year 28 samples were collected by departmental officers for Fluorine examination, fourteen for bacteriological examination, and one for chemical estimation.

Offensive Trades.

Abattoirs and slaughter yards	90
Bone boiling, bone mills, &c.	1
Bone manure	1
Fat melting and extracting	15
Fellmongering, wool scouring	2
Gut and casing works	3
Knackers' yards	1
Marine stores	3
Piggeries	15
Poultry killing	2
Skin stores	18
Garbage depots	27
Cattle saleyards	49

Dangerous Trades.

Nil.

Food Samples.

Number of samples taken	361
Number found adulterated	24
Number of prosecutions	22

In cases where prosecutions were not undertaken, an explanation has been asked from the Council.

E. J. CROWE,
District Health Officer.

NORTH-WESTERN HEALTH AREA.

Staff—

Dr. N. J. Caldwell, District Health Officer.
Mr. R. W. Pearce, District Health Inspector.
Miss E. Martin, Visiting Tuberculosis Nurse.
Dr. G. T. James, Tuberculosis Officer.
Miss J. Hall, Tuberculosis Nurse.

Municipal Districts—

Cities	2
Boroughs	6
Shires	31
	39

Population, 165,896.
Area, 14,479 square miles.
Number of Medical Officers, 44.
Number of Health Inspectors, 11.

Infectious Diseases.

In 1951 the following diseases were reported : —

Disease.	Number of Cases Reported.
Diphtheria	1
Scarlet Fever	40
Typhoid Fever	..
Tuberculosis	31
Poliomyelitis	20
Hydatids	1
Tetanus	..
Cerebrospinal Meningitis	3
Encephalitis Lethargica	1
Dysentery	..
Helminthiasis	..
Malaria	1
Anchylostomiasis	..
Erythema Nodosum	1
Undulant Fever	1

Diphtheria Immunization.

Immunization was carried out in twelve municipalities and 2,011 children were immunized.

Vaccinations.

Vaccination against Small Pox was carried out in fourteen municipalities and 3,266 children were vaccinated.

District Health Inspector.

Conferred with Municipal Executive Offices on health matters concerning their respective municipalities, assisted in the organization of Mantoux campaigns, advised and assisted Health Inspectors throughout the Health Area, and attended to all matters referred to him from the Head Office.

Surveys of Castlemaine and Kyneton Water Supplies were also conducted.

Inspections carried out :—

Abattoirs	108
Bakehouses	42
Boarding houses	36
Butchers' shops	82
Camps	4
Cattle sale yards	14
Dairies	7
Eating houses	78
Inquiries	9
Factories	10
Grocers	52
Hotels	24
Markets	6
Offensive trades (including tips, nightsoil depots)	62
Public buildings	6
Sanitary inspections	..
Shops	29
Vehicles	21

Mantoux Testing.—City of Horsham, Borough of Stawell, Shires of Wimmera, Arapiles, Warracknabeal, Stawell.

10463/52.—6

Meat Areas.

Meat Area.	Population (Approximate).
Ballarat	40,000
Horsham	6,500
Maryborough	8,000
Daylesford	3,100
Castlemaine	5,808
Kyneton	*

* Not yet in operation.

During this year municipal abattoirs have been erected in Castlemaine.

Tuberculosis Testing (Mantoux Skin Tests).

Municipality.	Numbers Tested.
City of Horsham	1,071
Shire of Arapiles	250
Shire of Wimmera	407
Shire of Stawell	1,060
Shire of Warraeknabeal	300
Borough of Stawell	736

Travelling T.B. Nurse.

Municipalities visited	45
Homes	420
T.B. eases	355
Contacts	554
X-rays ordered	178
Skin tests	180
Skin tests at sehools	3,824

Water Supply.

The following reticulated services are in operation :—

Reticulated Service.

Avoea	Sugar Loaf Reservoir
Ballarat City ..	Ballarat Water Commission
Ballarat Shiro ..	Ballarat Water Commission
Baechus Marsh ..	State Rivers and Water Supply Commission
Ballan	State Rivers and Water Supply Commission
Bulla	Sunbury Water Trust
Buninyong ..	Ballarat Water Commission
Castlemaine ..	State Rivers and Water Supply Commission
Clunes	Newlyn Reservoir
Croswiek ..	Newlyn Roservoir
Daylesford ..	Bullarto Reservoir
Dimboola ..	Karkarooc and Wimmera Water Trust
Donald ..	Lonsdale Seheme
Dunmunkle ..	Wimmera United and Murtoa Water Trust
Glenville ..	State Rivers and Water Supply Commission
Gisborne ..	Maeedon Water Trust
Glenlyon ..	Hepburn Water Trust
Horsham ..	State Rivers and Water Supply Commission
Kyneton ..	Kyneton and Malmsbury Water Trust
Kaniva ..	Kyneton–Kaniva Water Trust
Lowan	Lowan Water Trust
Maryborough ..	Evansford Reservoir
Nowstead ..	State Rivers and Water Supply Commission
Newham and Woodend	Woodend Water Trust
Romsey ..	Romsey Water Trust
Ripon	Mount Cole Reservoir
Sebastapol ..	Ballarat Water Commission
Stawell Borough ..	Grampians Supply
Stawell Shire ..	State Rivers and Water Supply Commission
Talbot	Evansford Reservoir
Tullaroop ..	Evansford Reservoir
Warraeknaboal ..	Warracknabeal Water Trust
Wimmera ..	State Rivers and Water Supply Commission

Offensive Trades.

Abattoirs, private	100
Abattoirs, munieipal	3
Fat rendering	10
Gut eleaning	4
Knackers' yards	3
Marine stores	11
Piggeries	40
Poultry killing	3
Rag sorting	1
Skin stores	25
Boiling-down works	11
Nightsoil depots	42
Garbage	40
Cattle sale yards	32
Wool scouring	3
Bone mills	1
Fellmongering	4
Soap works	1

Dangerous Trades.

Nil.

Food Supplies.

Number of samples taken	323
Number of samples adulterated	26
Number of samples adulterated in whieh no legal aetion was taken	8
Number of samples adulterated in which legal aetion was taken	18

Foodstuff Seized by Council Health Inspectors.

Pork ..	50 lb.	Walnuts ..	40 lb.
Dried apples	60 ,,	Chocolate ..	20 ,,
Swedes ..	40 ,,	Raisins ..	30 ,,
Carrots ..	40 ,,	Ham ..	70 ,,
Onions ..	20 ,,	Sultanas ..	45 ,,
Sausages ..	24 ,,	Tomatoes ..	25 ,,
Milk ..	20 gals.	Baeon ..	60 ,,
Snowballs ..	33 doz.	Jam ..	75 ,,
Fish ..	40 lb.	Freneh beans	80 ,,
Sponge eakes	10 trays	Peaches ..	135 ,,
Dates ..	90 lb.		

Sanitation.

Sewerage Areas.

The following authorities are now operating :—

Ballarat Sewerage Authority.
Castlemaine Sewerage Authority.
Dimboola Sewerage Authority.
Horsham Sewerage Authority.
Kyneton Sewerage Authority.
Murtoa Sewerage Authority.
Nhill Sewerage Authority.
Warracknabeal Sewerage Authority.

Areas proelaimed but not yet operating :—

Maryborough Sewerage Authority.
Stawell Sewerage Authority.

Septic Tanks.

Number in area, 1,714.

REPORT OF THE FOOD STANDARDS COMMITTEE, 1951-52.

During the year 1951–52, six meetings of the Food Standards Committee were held.

The following is a summary of the recommendations made for amendment to the Food and Drug Standards Regulations, all of which have been approved by the Governor in Council :—

(*a*) Prohibiting the preparation for sale of any patent medicine containing cocaine or heroin.

(*b*) Providing a standard for imitation fruit and vegetable products.

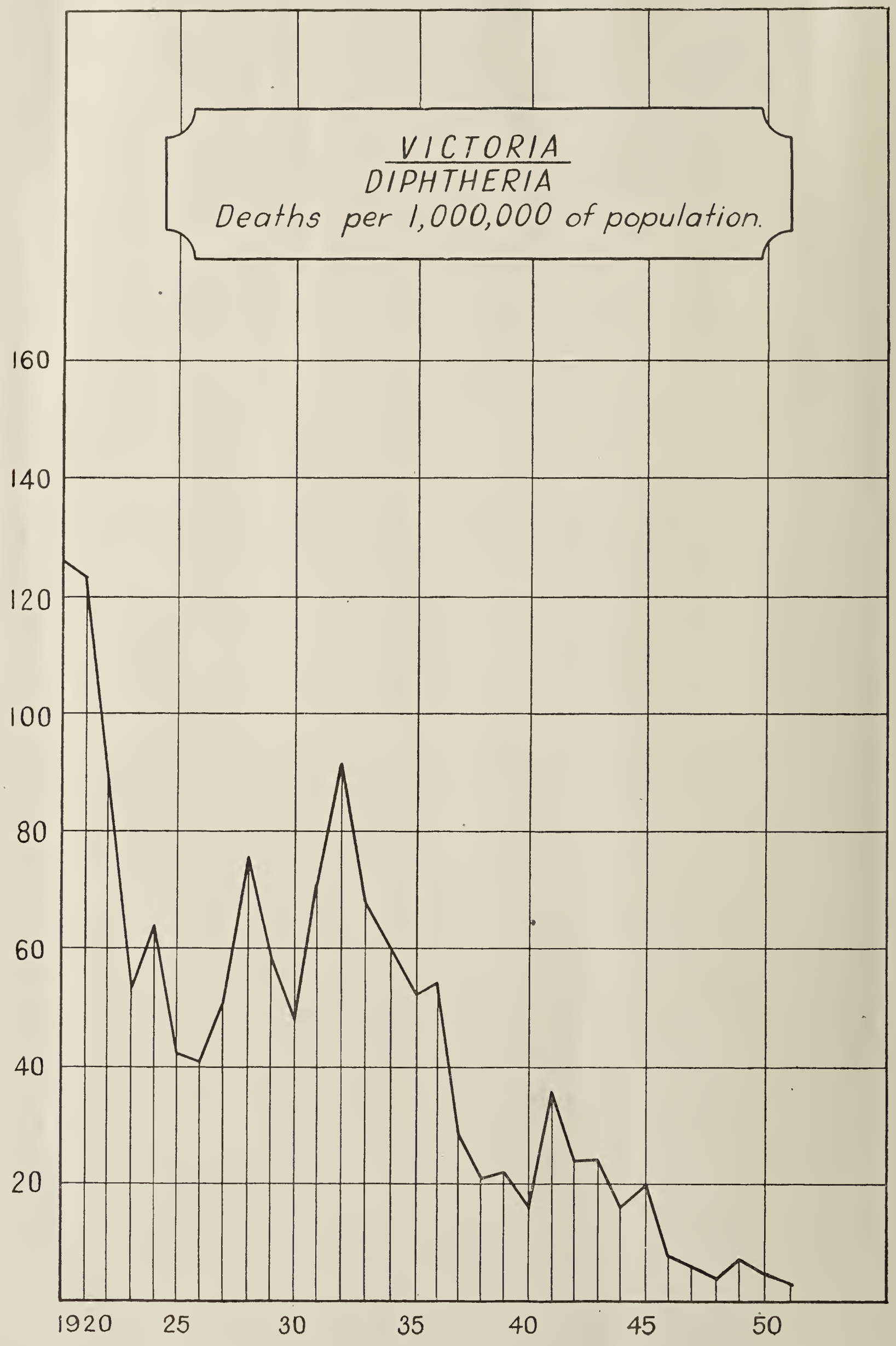
(*c*) Revising the standards for—

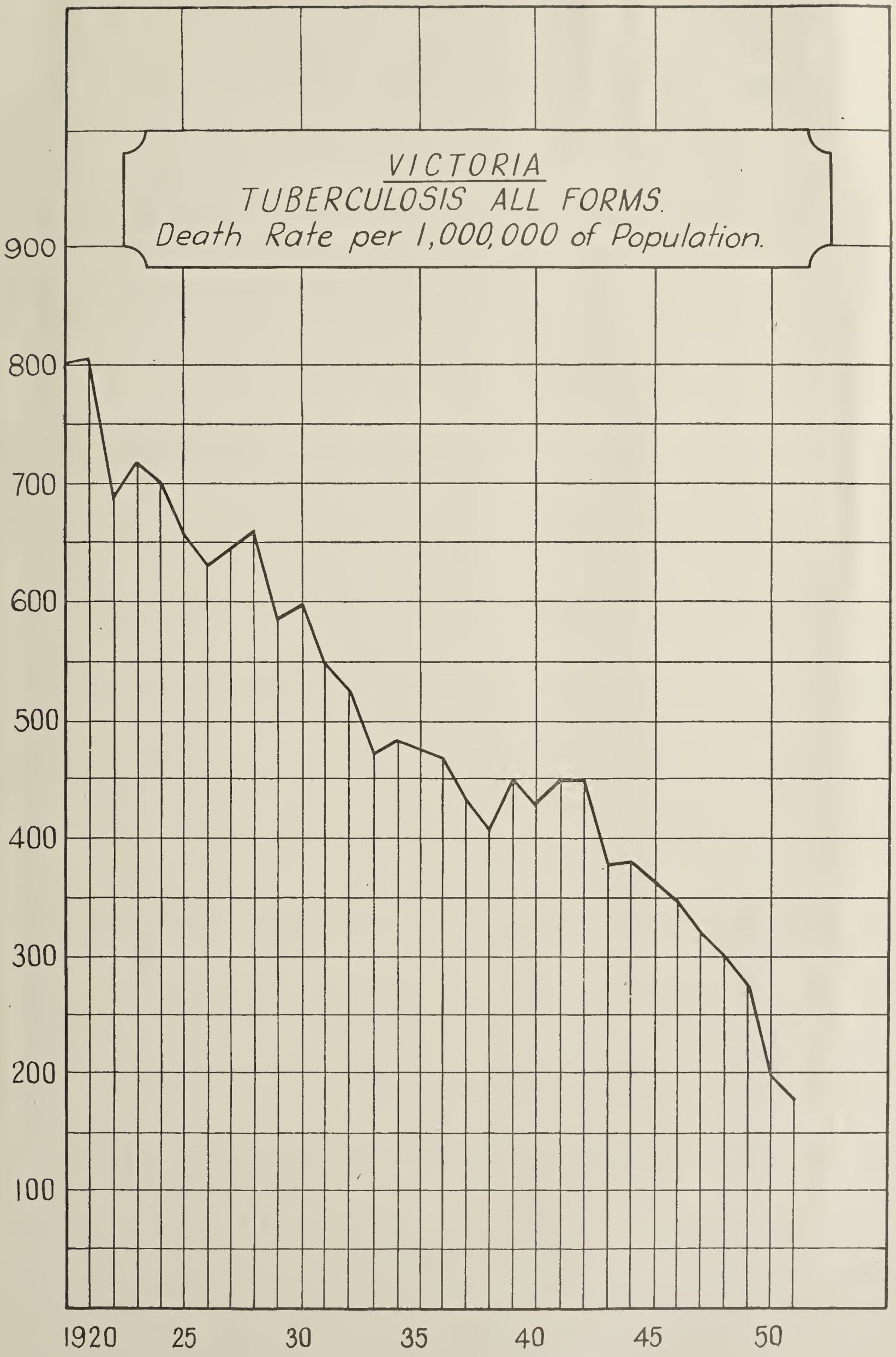
(i) sausage meat ;

(ii) fruit jelly crystals and fruit jelly tablets.

(*d*) Revising the regulations governing the labelling of medicinal paraffin.

(*e*) Amending the regulations to permit the bleaching of flour by an electrical process.


VICTORIA
DIPHTHERIA
Deaths per 1,000,000 of population.
160
140
120
100
80
60
40
20
1920
25
30
35
40
45
50

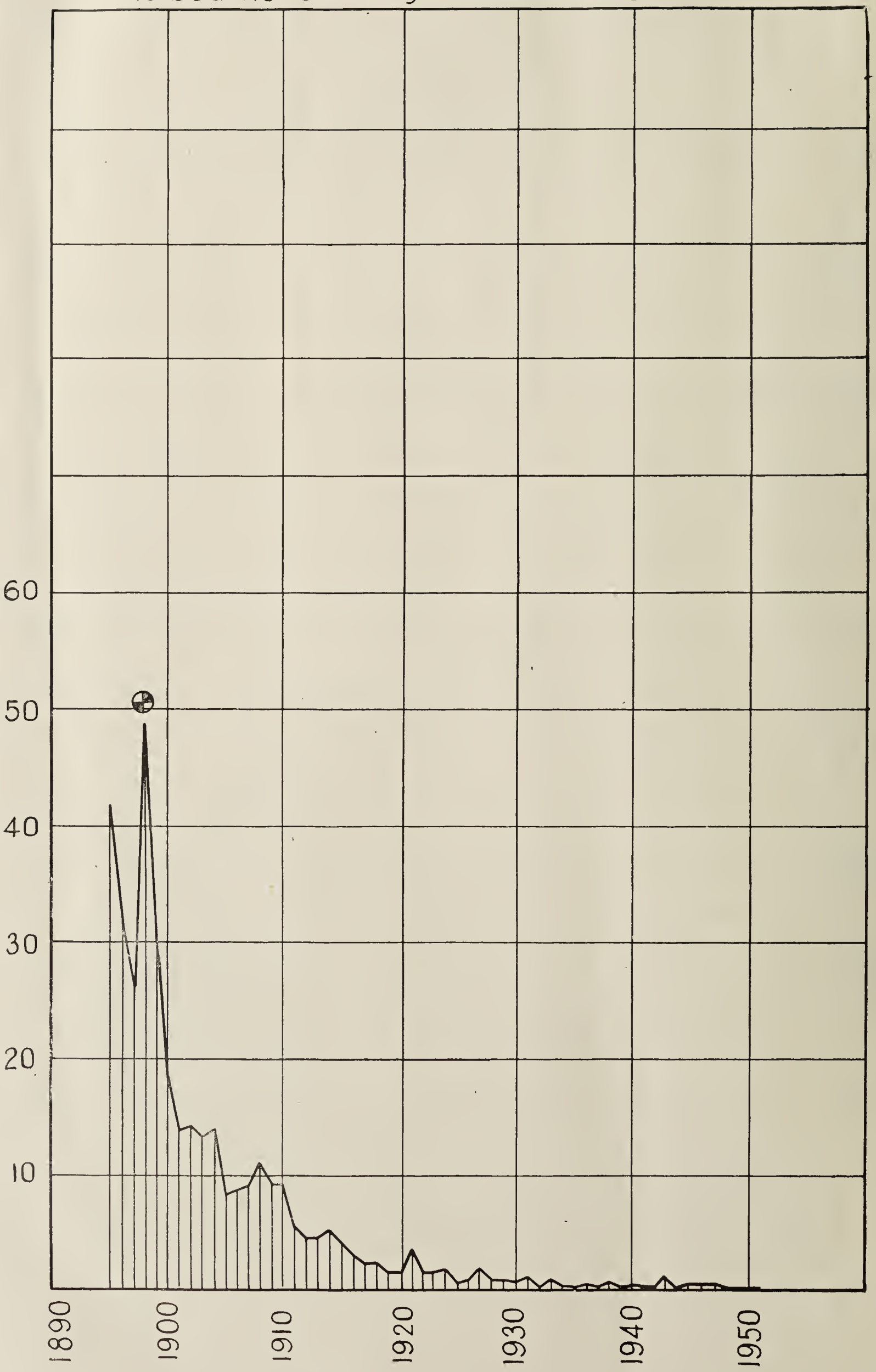

VICTORIA
TUBERCULOSIS ALL FORMS.
Death Rate per 1,000,000 of Population.
900
800
700
600
500
400
300
200
100
1920
25
30
35
40
45
50

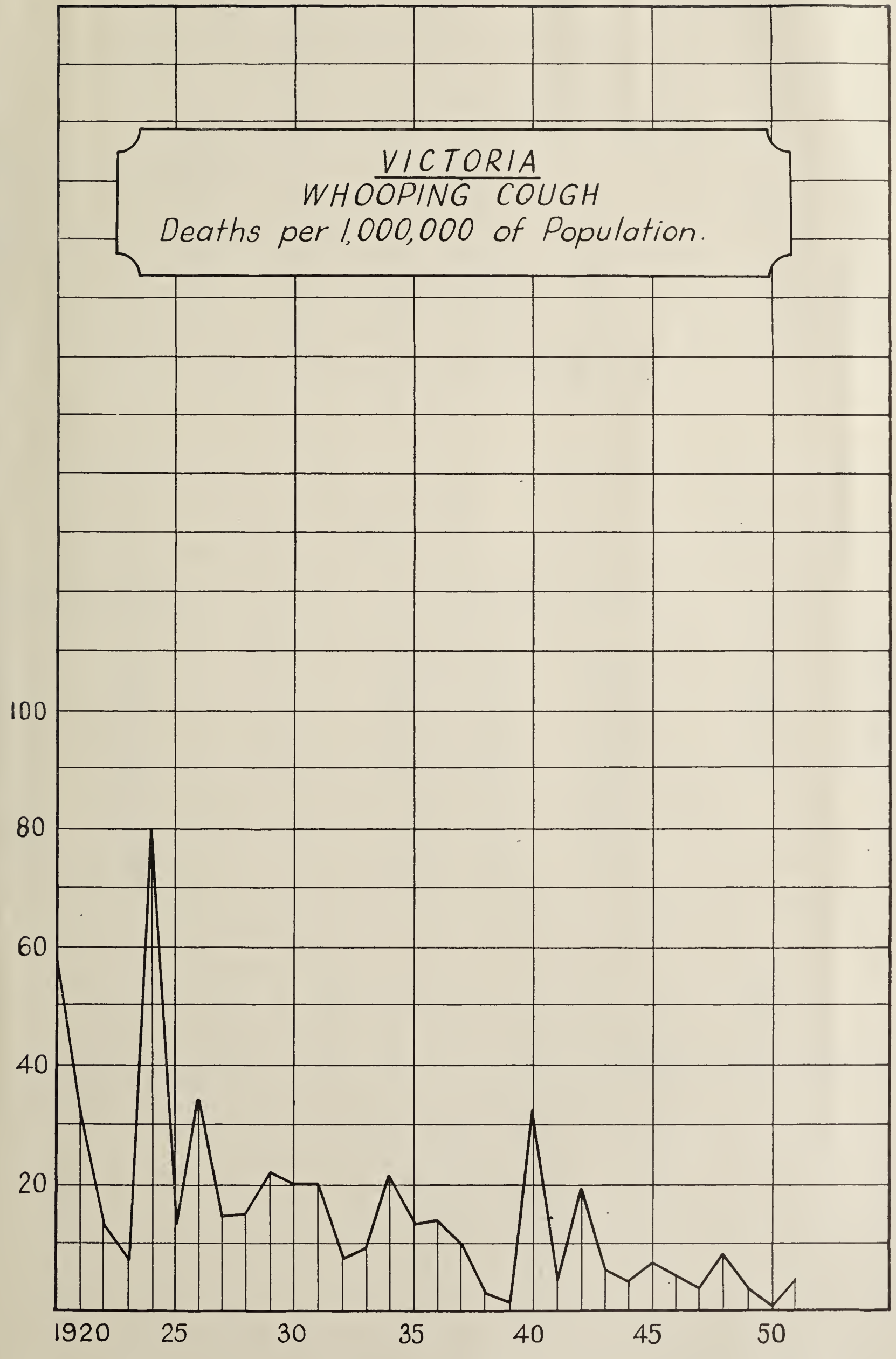
VICTORIA

TYPHOID FEVER

Death Rate per 100,000 of population.

Melbourne Sewerage Introduced.




VICTORIA
WHOOPING COUGH
Deaths per 1,000,000 of Population.
100
80
60
40
20
1920
25
30
35
40
45
50

VITAL STATISTICS.

POPULATION AT 31ST DECEMBER, 1951.

Victoria 2,291,354

Metropolitan Area 1,360,200

SUMMARY OF VITAL STATISTICS, VICTORIA, 1951.

Division.	Number of—				Rate per 1,000 of Mean Population.*			Infantile Mortality.
	Marriages.	Births.	Deaths.	Deaths under One Year.	Marriages.	Births.	Deaths.	Deaths under One Year per 1,000 Births.
Greater Melbourne	..	26,382	14,047	549	..	19·57	10·42	20·81
Remainder of the State	..	24,171	9,399	594	..	26·25	10·21	24·57
Victoria	21,117	50,553	23,446	1,143	9·31	22·28	10·33	22·61

* Subject to revision.

BIRTHS.

The following table shows the birth rates from 1855 to 1951 :—

Period.	Average Annual Births.	Rate per 1,000 of Population.	Period.	Average Annual Births.	Rate per 1,000 of Population.
1855–59	17,154	38·49	1936	28,883	15·63
1860–64	24,060	43·29	1937	29,731	16·02
1865–69	25,963	39·77	1938	30,344	16·25
1870–79	26,971	34·60	1939	30,493	16·20
1880–89	30,113	31·45	1940	31,962	16·86
1890–99	34,310	29·37	1941	34,406	17·76
1900–09	30,655	24·92	1942	35,927	18·27
1910–19	33,800	24·27	1943	39,117	19·74
1920–29	35,457	21·77	1944	39,358	19·70
1930	33,127	18·55	1945	41,200	20·46
1931	30,332	16·86	1946	46,693	22·99
1932	27,464	15·18	1947	47,366	23·06
1933	28,392	15.59	1948	46,099	22·06
1934	27,828	15·20	1949	46,873	21·92
1935	27,884	15·16	1950	49,830	22·61
			1951	50,553	22·28

MARRIAGES.

Marriages in Victoria in 1951 numbered 21,117.

Period.	Marriage Rate per 1,000 of Population.	Period.	Marriage Rate per 1,000 of Population.
1931	5·66	1941	10·79
1932	6·49	1942	12·02
1933	6·96	1943	9·26
1934	7·57	1944	8·94
1935	8·38	1945	8·20
1936	8·61	1946	10·54
1937	8·74	1947	9·95
1938	9·16	1948	9·59
1939	9·23	1949	9·38
1940	11·76	1950	9·22
		1951	9·31

The 1931 figure is the lowest recorded in the history of the State.

The marriage rate of 12·02 per 1,000 of population in 1942 was the highest on record.

INFANT MORTALITY.

(Deaths under One Year.)

Period.	Mortality Rate per 1,000 Births.			Period.	Mortality Rate per 1,000 Births.		
	Metropolitan Area.	Rest of State.	Victoria.		Metropolitan Area.	Rest of State.	Victoria.
1880–84	170·1	92·3	120·0	1936	44·1	40·7	42·3
1885–89	178·5	97·9	133·3	1937	37·1	36·3	36·7
1890–94	140·4	94·9	114·7	1938	34·1	34·3	34·2
1895–99	131·5	100·0	112·5	1939	32·3	38·9	35·6
1900–04	116·5	86·2	98·2	1940	39·7	39·2	39·5
1905–09	96·5	71·5	81·2	1941	34·6	38·1	36·2
1910–14	84·2	64·9	73·8	1942	43·8	38·9	41·6*
1915–19	76·2	55·4	66·1	1943	34·1	38·2	35·8
1920–24	71·6	58·6	65·3	1944	31·0	33·3	32·0
1925–29	58·3	50·2	54·3	1945	26·9	29·6	28·0
1930	50·7	42·3	46·5	1946	27·0	27·3	27·2
1931	48·0	41·1	44·7	1947	26·8	25·6	26·3
1932	47·7	38·9	43·0	1948	23·8	24·1	23·9
1933	40·9	40·0	40·4	1949	20·3	23·8	21·9
1934	48·2	41·4	44·6	1950	19·4	20·9	20·1
1935	43·0	39·5	41·2	1951	20·8	24·6	22·6

* The high infant mortality rate for 1942 can be ascribed to whooping cough.
Details will be found in the report of the Maternal and Child Hygiene Branch.

DEATHS.

The number of deaths in 1951 was 23,446 and the death rate per 1,000 of population in 1951 was 10·33.

Period.	Average Annual Number of Deaths.	Rate per 1,000 of Mean Population.	Period.	Average Annual Number of Deaths.	Rate per 1,000 of Mean Population.
1870–79	12,133	15·50	1938	18,955	10·15
1880–89	14,510	15·13	1939	20,169	10·72
1890–99	16,618	14·21	1940	20,293	10·70
1900–09	15,194	12·38	1941	20,416*	10·54
1910–19	15,994	11·47	1942	21,973*	11·18
1920–29	16,524	10·03	1943	21,327*	10·76
1930	15,959	8·93	1944	20,502*	10·26
1931	17,033	9·47	1945	20,496*	10·18
1932	16,805	9·29	1946	21,534*	10·60
1933	17,456	9·59	1947	21,442*	10·44
1934	18,648	10·18	1948	21,825	10·44
1935	18,456	10·03	1949	21,991	10·28
1936	18,778	10·16	1950	22,341	10·14
1937	18,613	10·03	1951	23,446	10·33

* Excludes deaths of Defence personnel and of Internees and Prisoners of War from overseas.

MATERNAL DEATHS.

Period.	Average Annual Number of Deaths from—						Total.		Rate per 10,000 Live Births from—						Total.	
	Sepsis of Pregnancy, Childbirth and the Puerperium.	Toxaemias of Pregnancy and the Puerperium.	Haemorrhage of Pregnancy and Childbirth.	Abortion without mention of Sepsis or Toxaemia.	Abortion with Sepsis.	Other Complications of Pregnancy, Childbirth, and the Puerperium.	Including Criminal Abortion.	Excluding Criminal Abortion.	Sepsis of Pregnancy, Childbirth, and the Puerperium.	Toxaemias of Pregnancy and the Puerperium.	Haemorrhage of Pregnancy and Childbirth.	Abortion without mention of Sepsis or Toxaemia.	Abortion with Sepsis.	Other Complications of Pregnancy, Childbirth, and the Puerperium.	Including Criminal Abortion.	Excluding Criminal Abortion.
1926–29 ..	198						198	177	57·02						57·02	51·10
1930–34 ..	160						160	133	54·37						54·37	45·20
1935–39 ..	139						139	98	47·17						47·17	33·12
1940–44 ..	120						120	80	33·14						33·14	22·18
1945–49 ..	69						69	56	15·12						15·12	12·36
1950 ..	4	15	3	3	8	10	43	35	0·80	3·01	0·60	0·60	1·61	2·01	8·63	7·02
1951 ..	3	19	8	2	10	8	50	40	0·59	3·76	1·58	0·40	1·98	1·58	9·89	7·91

NOTE.—The above table shows the causes of maternal deaths in 1950 according to the Sixth Revision of the International List of Causes of Death. Corresponding details are not available for years prior to 1950.

DEATH RATES FROM CERTAIN CAUSES.

Cause of Death.	Deaths per Million of Population.*									
	1908–12.	1942.	1943.	1944.	1945.	1946.	1947.	1948.	1950.‡	1951.‡
Heart diseases (including the conditions producing diseases of the heart)†	1,141	2,107	3,069	3,020	3,151	3,293	3,275	3,394	3,242	3,363
Cancer	838	1,355	1,378	1,331	1,366	1,396	1,416	1,385	1,456	1,397
Nephritis, acute and chronic	576	687	676	639	646	640	573	547	246	227
Pneumonia and broncho-pneumonia	834	730	697	576	558	613	555	594	383	427
Accidental violence	531	467	379	390	333	420	478	460	497	527
Tuberculosis (all forms)	1,037	442	375	377	363	350	330	307	196	179
Diabetes	107	212	29	208	208	213	213	217	167	156
Enteritis and diarrhoeal diseases	833	84	85	66	53	58	42	53	..	..
Gastro-enteritis and colitis, except diarrhoea of newborn	..	..	..	..	..	..	..	..	48	70
Diphtheria	122	24	24	17	19	8	6	5	5	3

* Subject to revision.
† Increase due to form of certification of death having been changed.
‡ Death rates from certain causes according to the Sixth Revision of the International List of Causes of Death.

NOTE.—Owing to changes in classification, rates given for nephritis, pneumonia, and diabetes for 1950 and 1951 are not strictly comparable with those given for years prior to 1950.

By Authority: W. M. HOUSTON, Government Printer, Melbourne.